Usenet Newsgroup Archive: rec.radio.amateur.space

2011

These Usenet messages were preserved as a plain-text archive. This PDF was generated by Digital Library of Amateur Radio & Communications from the source text file in 2026.

Date span: 2011-01-01 through 2011-12-31

Source text: rec.radio.amateur.space.txt

Source item: https://archive.org/details/usenet-rec

Messages included in this PDF: 174

Messages are presented chronologically by archived date.

Binary or encoded payloads are not printed as blocks of encoded text; a placeholder appears where such material was detected. The original source text is unchanged.

1. Crossposting Permitted to rec.radio.amateur.moderated

Newsgroup: rec.radio.amateur.space
Date: 2011-01-01 07:00:01 UTC
From: rram@panix.com
Message-ID: <radio/ham-radio/moderated/crossposting-1-1293865200@panix.com>
Source record: 427
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.info

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Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/moderated/crossposting
Revision: 1.1 2009/04/12 19:42:04
Posting-Frequency: posted monthly
URL: http://www.panix.com/~rram/usenet/rram/index.html

Changes followed by "|".

After a 30-day public discussion and feedback period to gauge reader
opinions in March of 2009:

http://groups.google.com/group/rec.radio.amateur.moderated/browse_thread/thread/d7d337db35
f23326

the rec.radio.amateur.moderated Moderation Team has decided to consider
amending its charter, and permit limited simultaneous crossposting to
rec.radio.amateur.moderated and one other unmoderated
amateur-radio-related discussion newsgroup. We are currently trying
this on a temporary basis (90 days, through early July 2009), and adopt
it permanently if successful.

Approved rec.radio.amateur.* newsgroups are those that are currently
listed in the latest version of the "List of Big Eight Newsgroups" which
is crossposted monthly to news.announce.newgroups, news.groups, and
news.lists.misc.

Approved alt.radio.amateur.* and alt.ham-radio.* newsgroups are those
that have been created consistent with the suggestions in "So You Want
to Create an Alt Newsgroup" at:

http://www.faqs.org/faqs/alt-creation-guide/

Approved regional hierarchy newsgroups are those that contain either
"radio.amateur" or "ham-radio" in their names, including
uk.radio.amateur and aus.radio.amateur.misc.

We will make every reasonable effort to keep our list of approved
newsgroups up-to-date. In case we have overlooked any, and a submission
is rejected in error as a result, the rejected submitter can E-mail us
at our administrative contact address (in the signature at the bottom of
this article, and the default Reply-To for the rejection message)
requesting that it be added, and that the article be approved. We may
still choose to reject articles crossposted to any alt.* newsgroup with
an inappropriate name, including obscene language, embedded
name-calling, or encouragement of unlawful conduct.
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Please direct any comments, questions, or criticisms to
rec-radio-amateur-moderated-request@panix.com.

2. ANS-002 AMSAT News Service Weekly Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2011-01-02 02:12:50 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <000e01cbaa22$8ac8b350$a05a19f0$@net>
Source record: 428
Cross-posted to: rec.radio.amateur.space,rec.radio.info

AMSAT NEWS SERVICE
ANS-002

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* AO-51 Power Management Enabled as Satellite Enters Eclipses
* Latest Winners Announced in AMSAT Fundraising Drive
* Ham Radio University Program Includes Satellite Operations
* Chichijima Island Activation Includes Satellites
* Satellite Shorts From All Over
* Rogue GEO Satellite Back Under Control
* Russian Engineers Plan to Extend Internet to Space
* ARISS Status Report for the Week of December 27, 2010

SB SAT @ AMSAT $ANS-002.01
AO-51 Power Management Enabled as Satellite Enters Eclipses

AMSAT News Service Bulletin 002.01
>From AMSAT HQ SILVER SPRING, MD.
January 2, 2011
To All RADIO AMATEURS
BID: $ANS-002.01

The AO-51 Control Team reported they enabled the power management function of the satellite in anticipation of eclipses expected to begin before the end of December, 2010.

Command Team member Mark Hammond, N8MH wrote, "You might see the transmitter power levels go UP and DOWN a bit as the battery voltage changes. We'll make some adjustments and tweaks to keep it from going UP and DOWN too often--but it's the way it's gonna work. In a few weeks we expect transmitter(s) to be OFF while in eclipse and ON when in the sun."

AO-51 users should expect adjustments and various power management schemes from now until the end of February when we'll again see full sunlight for a brief period. On December 28 the Command Team shut down

the digital transmitter TXA (435.150 MHz). This is due to less sun (we are on the edge of eclipse). TXA off for the most part, except to collect telemetry. The 435.300 MHz repeater will be kept running as much as possible.

The command team could really use your help. If you work AO-51 (or hear it) and there isn't a recent entry, please make a report entry at: http://oscar.dcarr.org/ so we know all is well.

Things are touch-and-go now that we are experiencing eclipses, and reports on the OSCAR Status Page that the bird is up and functional are extremely helpful.

The Command Team notes that expected behavior is for the transmitter to go OFF during eclipse, but eclipses are only a couple minutes or less at the moment. The regular voice repeater is planned to be operation for the month of January, 2011 as the Command Team manages the changing eclipse periods. AO-51 will be seeing longer eclipses and there will be times when the bird goes off for several minutes at a time--including over populated areas. It seems like it's occurring in the early morning time frame.

Keep up to date with the latest Command Team and Operations Group AO-51 News at: http://www.amsat.org/amsat-new/echo/CTNews.php

[ANS thanks Mark, N8MH for the above information]

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SB SAT @ AMSAT $ANS-002.02
Latest Winners Announced in AMSAT Fundraising Drive

AMSAT News Service Bulletin 002.02
>From AMSAT HQ SILVER SPRING, MD.
January 2, 2011
To All RADIO AMATEURS
BID: $ANS-002.02

AMSAT's fundraising campaign via PayPal Widget continues to produce results. AMSAT VP Operations Drew Glasbrenner, KO4MA announced last week, "Beginning with the $1250 mark, we will be randomly picking a donor from every $250 increment to receive an item from the AMSAT store."

The drawing winners for the next three $250 increments have been announced:
$1000-$1250 Richard Lewis
$1250-$1500 Eric Schecter
$1500-$1750 Stephen Silverman and Charles Suprin

In conclusion, Drew writes, "Thanks again, and if you'd like to donate to the campaign or share the widget to your own website, please visit http://www.amsat.org. The widget is on the front page below the ARISSat-1

news, and you can click on "Give" to donate, or "add to site" to receive

the HTML code, or "supporters" to scroll through the statistics. I hope
to soon see more familiar names scrolling across the widget soon,
showing
your support for AMSAT's next two satellites."

Donations, memberships, and store purchases may also be made through the

AMSAT store on the website, or by calling Martha at 1 888 322 6728.

[ANS thanks Drew KO4MA for the above information]

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SB SAT @ AMSAT $ANS-002.03
Ham Radio University Program Includes Satellite Operations

AMSAT News Service Bulletin 002.03
>From AMSAT HQ SILVER SPRING, MD.
January 2, 2011
To All RADIO AMATEURS
BID: $ANS-002.03

On January 9, 2011, AMSAT Area Coordinator Pete, WB2OQQ will be pre-
senting "Satellite Operations with an HT" at the Ham Radio University
2011 event at Briarcliffe College, Bethpage, NY. Full information can
be found on-line at: http://www.hamradiouniversity.org.

Pete's presentation is scheduled at 11:00 - 11:50AM in Room D. He will
be using the special event call sign W2V for the afternoon satellite
passes. Someone attending his forum will be leaving with an ELK Antenna,

graciously donated by the company for the event.

[ANS thanks Pete, WB2OQQ for the above information]

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SB SAT @ AMSAT $ANS-002.04
Chichijima Island Activation Includes Satellites

AMSAT News Service Bulletin 002.04
>From AMSAT HQ SILVER SPRING, MD.
January 2, 2011
To All RADIO AMATEURS
BID: $ANS-002.04

Makoto, JI5RPT (JD1BLY) and Harry, JG7PSJ (JD1BMH) are again active
from Chichijima Island (IOTA AS-031) between 24 December 2010 and
8 January 2011.

They are active on all bands 160-10m, with focus on the lower bands,
using CW, SSB, Digital and the satellites.

JD1BLY will be active between 24 December 2010 and 3 January 2011,
while JD1BMH will be active between 30 December and 8 January 2011.

QSL via the bureau to the JD1 callsigns or direct to their home
callsigns.

[ANS thanks the SouthGate ARC News for the above information]

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SB SAT @ AMSAT $ANS-002.05
Satellite Shorts From All Over

AMSAT News Service Bulletin 002.05
>From AMSAT HQ SILVER SPRING, MD.
January 2, 2011
To All RADIO AMATEURS
BID: $ANS-002.05

+ The next Hudson Valley Satcom Group Net is Thursday January 6 at
8:00 PM EST (UTC - 5) on the MBARC 146.970 MHz repeater (-600; &
PL 100). The EchoLink node is N2EYH-L. Latest information can be
found on-line at: http://www.hhvsatcom.org. (Stu, WA2BSS)

+ University of Texas FASTRAC updated TLEs are available at:
http://tinyurl.com/25sykwb (UTexas.edu)

+ NASA has posted a video: Satellite Views of the ?Christmas
Blizzard?
on-line at: http://tinyurl.com/399x2r5

+ WB2SIH (grid FN31DD) reported a successful CW contact via AO-7 with
RW3XL (grid KO84DM) at a distance of 7,480 KM.

+ News received from Derrick, GM0FMW reports good transatlantic sat-
ellite contacts via HO-68 with Paul N2BX, Nick KB1RVT, Paul KB1QYS,
John K8YSE, Thomas KL0BK,and Ricky VE4AMU. Derrick wishes a Happy
New Year to all AMSAT members.

+ Clint, K6LCS published an updated copy of the "How to Work Ham Satel-
lites With Your HT" tutorial. This is posted on-line at:
http://www.work-sat.com

+ Online Registration is now available to register to the 1st IAA
Conference on University Satellites Missions and Cubesat Conference
in Rome. See http://www.gaussteam.com/ for the latest information.

+ On the morning of Tuesday, January 4, 2011, an eclipse of the Sun
will be widely visible across Europe and as far east as India. The
eclipse won't be visible in North and South America. UniverseToday.com

has the full story at: http://tinyurl.com/388sb2r

+ More NASA Videos! See http://tinyurl.com/2847r6h for Seasons Greetings

and a Look Back at 2010 from NASA. Watch the video at:
http://www.youtube.com/watch?vHhjjKUS7G8 for the "Best of the
Best"
Launches", powered by Music with imagery rarely seen by the public
that highlights three space shuttle launches.

+ Henk, PA3GUO has posted a video featuring his first test at satellite reception with a FUNcube dongle SDR receiver straight out of the box: http://www.youtube.com/watch?v=ZGlqKPPQo (HD video: set to 720p and
Fullscreen). Henk says his results are amazing with similar performance with a Kenwood TS2000x. Satellites in the video include HO68 CW, HO68 FM, AO51 FM, VO52 SSB, and OOREOS 1k2 AX25 (packet radio with MixW).

+ The software to auto-decode the University of Michigan RAX beacons
can be found on the website at: http://rax.engin.umich.edu.
Mike Rupprecht, DK3WN has his own version at
http://www.dk3wn.info/software.shtml.
(via Matt Bennett, KF6RTB, RAX Project Manager

[ANS thanks everyone for the above information]

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SB SAT @ AMSAT $ANS-002.06
Rogue GEO Satellite Back Under Control

AMSAT News Service Bulletin 002.06
>From AMSAT HQ SILVER SPRING, MD.
January 2, 2011
To All RADIO AMATEURS
BID: $ANS-002.06

UniverseToday.com reported that the geostationary satellite that became a "zombie" earlier this year and stopped communicating with ground controllers has now finally been reset and is under control.

The Galaxy 15 communications satellite had its "brains fried" by a solar flare and went rogue in early May. Although it was still functional, its navigation and communications systems would not accept commands, and the satellite drifted out of its orbit. On December 23, 2010, engineers at Intelsat were finally able to command the unit to reset after a battery drained. Shortly thereafter Galaxy 15 began accepting commands, and then was put into safe mode. "We are pleased to report it no longer poses any threat of satellite interference to either neighboring satellites or customer services," IntelSat said on their website.

While there was little chance that Galaxy 15 would crash into another satellite, it caused some problems when it entered an orbital space occupied by other satellites and "stole" their signal, thereby inter-

rupting other vendor's services to customers on Earth.

Engineers will now do some diagnostic tests and load updated commanding software to the satellite. The satellite is currently pointed towards the Sun, allowing the spacecraft's batteries to become fully charged and the satellite thermally balanced.

Once initial diagnostic testing has been completed, IntelSat will attempt to stop the drift of the satellite. This phase could take as long as two weeks to complete.

Intelsat is hoping full functionality of Galaxy 15 can be regained and they hope to relocate the satellite to an orbital location where we they can assess the viability of the payload, and conduct extensive in-orbit testing to determine the functionality of every aspect of the spacecraft.

Source: http://tinyurl.com/2amezh4

[ANS thanks UniverseToday.com for the above information

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SB SAT @ AMSAT $ANS-002.07
Russian Engineers Plan to Extend Internet to Space

AMSAT News Service Bulletin 002.07
>From AMSAT HQ SILVER SPRING, MD.
January 2, 2011
To All RADIO AMATEURS
BID: $ANS-002.07

Russian engineers have started drawing up a new 'Kosmonet' project, and its implementation will provide an opportunity for the Runet users to enter the 'Space' Internet.

The developers say that rapid access to the Internet is only part of the task set before the "Kosmonet". They give priority to guaranteeing
communications between spacecraft and establishing control over flying objects from any point on the Earth and stable communications with remote regions of Russia.

"Such a communication system is crucial for the north and in the Polar

Regions because satellites in the geostationary orbit cannot provide access to these regions. In fact, to built transmitter units there or lay optic fibre cables to these regions is either economically inexpedient or technically impossible, says deputy head of the Russian space agency," Vitaly Davydov.

"The new project is an upgraded version of the present system known as "Gonets" (Messenger). "It's crucial for Russia to have the possi-

bility of ensuring communication with any of its satellites at any time and linking them with the mission control centres. In short, we are "lifting" the Internet into orbit. At present, there is no such a system, and we hope to enter into this market first," Vitaly Davydov said.

"According to the president of the "Gonets" Satellite System" Company, Alexander Galkevich, it has been planned to place a group of 48 satellites into orbit that will cover the entire planet. In fact, 18 satellites are sufficient for Russia. This will make it possible to provide services that are highly sought on the market," says Mr Galkevich.

"Among the services demanded by consumers are voice communications, broadband broadcasting, video conferencing and transmitting short messages. Such services are not provided comprehensively by any existing system in the world," Alexander Galkevich said.

The developers emphasize that the "Kosmonet" does not depend on ground infrastructure. Communications will be maintained with the assistance of terminals and basic stations through satellites. Consequently, emergency situations such as earthquakes or other calamities cannot interrupt communications. The ground transmitting and receiving stations usually go out of order in such incidents. The "Kosmonet" will

help to control the movements of dangerous cargo shipments and link with ships at any point on a sea or an ocean.

According to preliminary estimates, about US$20 billion will be needed to implement the project. This will pay off in ten years. The preparations for launching the work have to be completed in three years. It will take five years to create the full-fledged space group.

Source: SouthGate ARC site: http://tinyurl.com/37rnkn8

[ANS thanks SouthGate ARC site for the above information]

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SB SAT @ AMSAT $ANS-002.08
ARISS Status Report for the Week of December 27, 2010

AMSAT News Service Bulletin 002.08
>From AMSAT HQ SILVER SPRING, MD.
January 2, 2011
To All RADIO AMATEURS
BID: $ANS-002.08

1. ISS Astronaut Sends Birthday Greetings to ARISS

On December 21, ARISS celebrated its tenth anniversary of the first school contact. The first contact was made with Burbank School in Illinois on December 21, 2000. Since that time, ARISS has performed 565 successful contacts with school children around the world. ESA astronaut P�olo Nespoli, IZ0JPA, from onboard the ISS, wished ARISS a Happy Birthday. His photo presenting his birthday wishes is available for download from: http://www.ariss-eu.org/Nespoli_10ARISS.jpg

ARRL also covered this story. See: http://tinyurl.com/38a4eog

2. ARISS International Team Meeting Held

The monthly ARISS International Team meeting was held on Tuesday, December 21. Topics of discussion included ARISS' tenth anniversary, the upcoming face to face meeting and a status on the Columbus module equipment as well as ARISSat-1. To view the minutes, see: https://www.rac.ca/ariss/arisstel2010-12-21.htm

3. AMSAT Article on 10th Anniversary of ARISS

The AMSAT (Radio Amateur Satellite Corporation) News Service bulletin (ANS-360) posted an article on the tenth anniversary of ARISS. See: http://www.amsat.org/amsat/archive/amsat-bb/48hour/msg82907.html

[ANS thanks Carol, KB3LKI for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office. And with that, take a moment to ponder what did Godzilla say after eating a four cylinder Datsun? "Gosh, I could have had a V-8!"

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

3. TAMIL ACTRESS HOT PHOTOS&VIDEOS

Newsgroup: rec.radio.amateur.space
Date: 2011-01-06 04:37:43 UTC
From: devi <satyamsivam9030@gmail.com>
Message-ID: <a4a2f5ee-0598-4759-ae37-94bd3b32f4ff@35g2000prb.googlegroups.com>
Source record: 429

UNSEEN HOT SEXY PHOTOS
http://karomasti9.blogspot.com/2011/01/never.html
SEXY DIYA MIRZA
http://karomasti9.blogspot.com/2010/12/diya-mirza.html
HOT AISHWARIYA RAI
http://karomasti9.blogspot.com/2010/12/aish.html
priyamani hot&sexy photos
http://karomasti9.blogspot.com/2010/12/priyamani.html
KATRINA SEXY PHOTOS
http://karomasti9.blogspot.com/2010/12/katrina.html
ANUSHKA HOT PHOTOS
http://karomasti9.blogspot.com/2010/12/anuska.html
BEAUTIFUL AISHWARIYA RAI
http://karomasti9.blogspot.com/2010/12/aiesh.html
TRISHA HOT PHOTOS
http://karomasti9.blogspot.com/2010/11/trisha-hot.html
AMISHAPATEL HOT VIDEOS
http://karomasti9.blogspot.com/search/label/amisha
HANSIKHA HOT SEXY PHOTOS
http://karomasti9.blogspot.com/search/label/HANSIKA
HOT SEXY COLLEGE GIRLS
http://karomasti9.blogspot.com/search/label/hot
BEAUTIFUL LARADATTA
http://karomasti9.blogspot.com/search/label/laradatta
NIKISHA HOT BOOBS
http://karomasti9.blogspot.com/search/label/nikisha
PRIYANKA SPICY LATEST PICS
http://karomasti9.blogspot.com/search/label/priyanka
ONLY FOR YOUTH
http://karomasti9.blogspot.com/search/label/spicy
SRILEKHA UNSEENED PHOTOS
http://karomasti9.blogspot.com/search/label/Srilekha
CHOPRA UNBELIVABLE PHOTOS
http://karomasti9.blogspot.com/search/label/chopra
HOT BIPASA BASU PHOTOS
http://karomasti9.blogspot.com/search/label/bipasa
TRISHA IN A SEXY FEEL
http://karomasti9.blogspot.com/search/label/thrisha
SRISHA HOT BOOBS SHOW
http://karomasti9.blogspot.com/search/label/srisha
BEAUTIFUL POONAM PHOTOS
http://karomasti9.blogspot.com/search/label/poonam

4. 4000 Solutions manual to Mechanics, Mechanical Engineering and Aerospace Engineering Books

Newsgroup: rec.radio.amateur.space
Date: 2011-01-06 19:20:20 UTC
From: BERGH <mattosbw1@gmail.com>
Message-ID: <53a6d44e-63fe-444d-9977-87fde605d803@fu15g2000vbb.googlegroups.com>
Source record: 430

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Solution Manual Classical Mechanics (Douglas Gregory)
Solution Manual Advanced Dynamics (Donald T. Greenwood)
Solution Manual Principles of Dynamics (2nd Ed., Donald T. Greenwood)
Solution Manual Advanced Engineering Dynamics (2nd Ed., Jerry Ginsberg)
Solution Manual Classical Dynamics (Jorge V. José)
Solution Manual Impact Mechanics (W.J. Stronge)
Solution Manual Statistical Mechanics (2nd Ed., R.K. Pathria)
Solution Manual Introduction to Continuum Mechanics (4th Ed., W. Michael Lai, David Rubin & Erhard Krempl)
Solution Manual Analytical Mechanics (7th Ed., Grant R. Fowles, George Cassiday)
Solution Manual Introduction to Mechanical Engineering (Rizza)
Solution Manual Engineering Fundamentals and Problem Solving (4th Ed., Eide, Jenison, Mashaw & Northup)
Solution Manual Engineering Fundamentals and Problem Solving (5th Ed., Eide, Jenison, Northup & Mickelson)
Solution Manual Mechanical Engineering Principles (Bird & Ross)
Solution Manual Dynamics of Mechanical Systems (C.T.F. Ross)

Solution Manual Mechanics of Solids (C.T.F. Ross)
Solution Manual Introduction to Engineering Analysis (1st Ed., Hagen)
Solution Manual Introduction to Engineering Analysis (2nd Ed., Hagen)
Solution Manual Introduction to Engineering Analysis (3rd Ed., Hagen)
Solution Manual Engineering Design (Rudolph J. Eggert)
Solution Manual Creative Design of Products and Systems (Saeed Niku)
Solution Manual Fundamentals of Engineering Design (2nd Ed., Barry Hyman)
Solution Manual Engineering Design (4th Ed., George Dieter & Linda Schmidt)
Solution Manual Engineering Design and Graphics with Autodesk Inventor 2009 (James Bethune)
Solution Manual Engineering Design : A Project-Based Introduction (2nd Ed., Clive Dym & Patrick Little)
Solution Manual Engineering Design : A Project-Based Introduction (3rd Ed., Clive Dym & Patrick Little)
Solution Manual Tools and Tactics of Design (Dominick, Demel, Lawbaugh, Freuler, Kinzel & Fromm)
Solution Manual Engineering Analysis in Applied Mechanics (John Brewer)
Solution Manual Engineering Fluid Mechanics (William Graebel)
Solution Manual Advanced Fluid Mechanics (William Graebel)
Solution manual Essential Computational Fluid Dynamics (Oleg Zikanov)
Solution Manual Computational Fluid Dynamics : A Practical Approach (Jiyuan Tu, Guan Heng Yeoh & Chaoqun Liu)
Solution Manual Mechanics of Fluids (8th Ed., Massey)
Solution Manual Fluid Mechanics (5th Ed., Frank White)
Solution Manual Fluid Mechanics (6th Ed., Frank White)
Solution Manual Fluid Mechanics (7th Ed., Frank White)
Solution Manual Viscous Fluid Flow (3rd Ed., Frank White)
Solution Manual Thermodynamics and Heat Power (6th Ed., Kurt C. Rolle)
Solution Manual Introduction to the Thermodynamics of Materials (4th Ed. David Gaskell)
Solution Manual Engineering Thermodynamics : Work and Heat Transfer (4th Ed., G.F.C. Rogers & Yon Mayhew)
Solution Manual Introduction to Thermodynamics and Heat Transfer (2nd Ed., Yunus Cengel)
Solution Manual Fundamentals of Thermal-Fluid Sciences (1st Ed., Yunus Cengel)
Solution Manual Fundamentals of Thermal-Fluid Sciences (2nd Ed., Yunus Cengel)
Solution Manual Fundamentals of Thermal-Fluid Sciences (3rd Ed., Yunus Cengel & Robert Turner)
Solution Manual Thermodynamics : An Engineering Approach (5th Ed., Yunus Cengel)
Solution Manual Thermodynamics : An Engineering Approach (6th Ed., Yunus Cengel & Michael Boles)
Solution Manual Thermodynamics : An Engineering Approach (7th Ed., Yunus Cengel & Michael Boles)
Solution Manual Essentials of Fluid Mechanics : Fundamentals and

Applications (1st Ed., Yunus Cengel, John Cimbala)
Solution Manual Fluid Mechanics (1st Ed., Yunus Cengel & John Cimbala)
Solution Manual Fluid Mechanics (2nd Ed., Yunus Cengel & John Cimbala)
Solution Manual Heat Tranfer (2nd Ed., Yunus Cengel)
Solution Manual Heat and Mass Transfer : A Practical Approach (3rd Ed., Yunus Cengel)
Solution Manual Heat and Mass Transfer : Fundamentals and Applications (4th Ed., Yunus Cengel & Afshin Ghajar)
Solution Manual Introduction to Fluid Mechanics (6th Ed., Robert Fox, Alan McDonald & Philip Pritchard)
Solution Manual Introduction to Fluid Mechanics (7th Ed., Robert Fox, Philip Pritchard & Alan McDonald)
Solution Manual Fluid Mechanics (5th Ed., Douglas)
Solution Manual Fluid Mechanics (3rd Ed., Kundu & Cohen)
Solution Manual Fluid Mechanics (4th Ed., Kundu & Cohen)
Solution Manual Elementary Fluid Mechanics (7th Ed., Street, Watters & Vennard)
Solution Manual Fluid Mechanics with Engineering Applications (10th Ed., Finnemore & Franzini)
Solution Manual Fundamentals of Fluid Mechanics (4th Ed., Bruce Munson, Donald Young, Theodore Okiishi)
Solution Manual Fundamentals of Fluid Mechanics (5th Ed., Bruce Munson, Donald Young, Theodore Okiishi)
Solution Manual Fundamentals of Fluid Mechanics (6th Ed., Bruce Munson, Donald Young, Theodore Okiishi, Wade Huebsch)
Solution Manual Fundamentals of Fluid Mechanics - SI Units (6th Ed., Bruce Munson, Donald Young, Theodore Okiishi, Wade Huebsch)
Solution Manual A Brief Introduction to Fluid Mechanics (3rd Ed., Donald Young, Bruce Munson, Theodore Okiishi)
Solution Manual A Brief Introduction to Fluid Mechanics (4th Ed., Donald Young, Bruce Munson, Theodore Okiishi, Wade Huebsch)
Solution Manual Engineering Fluid Mechanics (7th Ed., Clayton Crowe, Donald Elger, John Roberson)
Solution Manual Engineering Fluid Mechanics (8th Ed., Clayton Crowe, Donald Elger, John Roberson)
Solution Manual Engineering Fluid Mechanics (9th Ed., Clayton Crowe, Donald Elger, John Roberson, Barbara Williams)
Solution Manual Fluid Mechanics (Potter & Foss)
Solution Manual Mechanics of Fluids (3rd Ed., Potter)
Solution Manual Fluid Power with Applications (7th Ed., Esposito)
Solution Manual Mechanics of Fluids (4th Ed., Shames)
Solution Manual Applied Fluid Mechanics (6th Ed., Mott)
Solution Manual Applied Fluid Mechanics - SI Units (6th Ed., Mott)
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13. Radio Meteor Obs. Bull. December 2010 Geminids Ursids

Newsgroup: rec.radio.amateur.space
Date: 2011-01-07 23:08:08 UTC
From: Chris Steyaert <observations@rmob.org>
Message-ID: <327fi6hq93tsmi6f6no34kf19lsp7e7oot@4ax.com>
Source record: 439
Cross-posted to: rec.radio.amateur.space,sci.astro.amateur

Radio Meteor Observation Bulletin No. 209 of December 2010 (85 K) is available now as

http://www.rmob.org/rmobtext/rmob1012.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

Chris

14. ANS-009 AMSAT News Service Weekly Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2011-01-09 16:14:33 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <001201cbb018$4a60c270$df224750$@net>
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AMSAT News Service Bulletin 009.01
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January 9, 2011
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Ray, W2RS thanks all who participated in AMSAT's Straight Key Night on OSCAR 2011. Please remember to nominate someone you worked for 'Best Fist.' Your nominee need not have the best fist of those you heard, just of those you worked. Nominations should be sent to w2rs@amsat.org. A list of those nominated will be published in ANS in early February, and in a forthcoming issue of The AMSAT Journal.

[ANS thanks Ray, W2RS, for the above information]

/EX

SB SAT @ AMSAT $ANS-009.02
AO-51 Power Management Update

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To All RADIO AMATEURS
BID: $ANS-009.02

Mark Hammond, N8MH notes that AO-51's power management feature has been operational now that this satellite is entering eclipses and its batteries cannot maintain full power when the solar panels are not being illuminated.

Mark noted, "The good news is that eclipses are pretty short right now and are occurring at early local time in the Northern Hemisphere. So many aren't even awake yet. Looking longer term--by early March 2011 we will have a period of full sun again, that lasts a couple of months. Then we are back into eclipses for a long, long time --and we'll have eclipses that will get up to 30 minutes in length! If that's over your QTH, that means you can't work AO-51 potentially for a whole pass. Final operating details remain to be determined to see exactly what the orbit and eclipses will look like at that time."

Mark has posted a file at: http://tinyurl.com/2358a3x (amsat.org) captured during the January 4 solar eclipse. You can see the normal eclipses of AO-51 every 100 mins (just over 14 times each day). Now, look right in the middle--see what is a double dip? That is a normal eclipse AND an extra one from the partial solar eclipse.

The AO-51 Command Team requests that users continue to post their observations of AO-51's operating condition on the Live OSCAR Satellite Status Page: http://oscar.dcarr.org/index.php.

Keep up to date with the latest Command Team and Operations Group AO-51 News at: http://www.amsat.org/amsat-new/echo/CTNews.php

[ANS thanks Mark, N8MH, for the above information]

/EX

SB SAT @ AMSAT $ANS-009.03
SO-67 Repeater to Resume Operations

AMSAT News Service Bulletin 009.03
From AMSAT HQ SILVER SPRING, MD.
January 9, 2011
To All RADIO AMATEURS
BID: $ANS-009.03

With the troublesome controller reprogrammed it is hoped that Sumbandila will resume its repeater schedule next week.

Four passes over South Africa during the evening of 8 January will be scheduled as a test. Please report your observations at David Carr's

live OSCAR status page: http://oscar.dcarr.org/

The weekly schedule will be published at http://amsatsa.org.za/ once full operations resume.

[ANS thanks Johann, ZR1CBC, for the above information]

/EX

SB SAT @ AMSAT $ANS-009.04
ARISSat-1/RadioSkaf-V Update

AMSAT News Service Bulletin 009.04
From AMSAT HQ SILVER SPRING, MD.
January 9, 2011
To All RADIO AMATEURS
BID: $ANS-009.04

The ARISSat-1/RadioSkaf-V team has faced a number of challenges since the
two amateur radio experiments were crated and shipped to NASA Johnson Center
in early October.

However, Gould Smith, AMSAT's ARISSat-1 project manager recently told ANS that, "We are very pleased to report that the flight unit and backup arrived in Moscow on December 8th, 2010 and were delivered to RSC-Energia in Moscow on December 29th, 2010.

We now understand that the Russian team is working on testing and integrating the Kursk Experiment and Silver-Zinc battery into the flight unit during their Russian Orthodox Christmas holidays." Gould went on to note that the flight unit is still scheduled to fly to the Baikonur Cosmodrome on January 11th, 2011 where it will be attached to Progress vehicle 41P. The Progress vehicle is scheduled to launch up to the ISS at the end of January.

Once ARISSat-1 is on board the ISS, crew members will re-attach the handles, install the battery, replace the dummy loads with the real antennas and perform a quick power-on test. The Extra Vehicular Act-ivity (EVA) to deploy the satellite is still scheduled for the end of February 2011.

Needless to say, the ARISSat-1 team is excited about all the effort being made by RSC-Energia to complete integration, and remains cau-tiously optimistic that all will continue to go according to schedule.

[ANS thanks Gould, WA4SXM, for the above information]

/EX

SB SAT @ AMSAT $ANS-009.05
Satellite Meeting in South Africa

AMSAT News Service Bulletin 009.05
From AMSAT HQ SILVER SPRING, MD.
January 9, 2011
To All RADIO AMATEURS
BID: $ANS-009.05

Eddie Leighton, ZS6BNS, will be anchoring a meeting on satellites on Saturday 15 January beginning at 10AM at South Africa's National Amateur Radio Centre.

Learn more about operating amateur radio satellites, how to build a simple satellite antenna, how to track and all the ins and outs of this fascinating part of Amateur Radio.

Find out how you can get involved in the SA AMSAT CubeSat project.

The NARC is situated at Sender Technology Park, Octave Road, Radiokop, Roodepoort.

[ANS thanks the SouthGateARC News Site for the above information]

/EX

SB SAT @ AMSAT $ANS-009.06
OSCAR-11 REPORT 31 December 2010

AMSAT News Service Bulletin 009.06
From AMSAT HQ SILVER SPRING, MD.
January 9, 2011
To All RADIO AMATEURS
BID: $ANS-009.06

At the present time OSCAR-11 (AKA UO-11 or UoSAT-2) is now in a very stable and predictable mode of operation. Between the period of November 30 to December 31, 2010 the satellite has been heard from December 10-20 and again is on since December 31. It is expected to switch-off on January 10, 2011 under control of its internal timer.

Excellent signals have been reported from stations located around the world, and good copy obtained from decoded telemetry frames. The satellite is now transmitting during eclipses, although signals are weaker at those times. This indicates that there is still some capacity remaining in the battery.

The on-board clock is now very stable. It gained seven seconds during December.

The VHF beacon frequency is 145.826 MHz. AFSK FM ASCII Telemetry

Reception reports have been received from Horatio CX8AF, John KB2HSH, Francisco PY9FP and Mike DK3WN. Many thanks for those and to everyone who posted reports on the satellite status website.

If you hear UO-11 please post the information on the Live OSCAR
Satellite Status Page: http://oscar.dcarr.org/index.php. Reports
around the expected times of switch-on and switch-off are of
special interest.

At the present time, while OSCAR-11 is operating in a predictable
way Clive, G3CWV no longer needs direct reports or files by e-mail.
Visit Clive's UO-11 web page http://www.g3cwv.co.uk/oscar11.htm
for links to a full UO-11 status report, a short audio clip to help
you identify the satellite and a file of the last telemetry received.
The website also contains an archive of news & telemetry data which
is updated from time to time, and details about using a sound card or
hardware demodulators for data capture. There is also software for
capturing data, and decoding ASCII telemetry.

[ANS thanks Clive, G3CWV, for the above information]

/EX

SB SAT @ AMSAT $ANS-009.07
Satellite Presentation at Murray State University, KY

AMSAT News Service Bulletin 009.07
From AMSAT HQ SILVER SPRING, MD.
January 9, 2011
To All RADIO AMATEURS
BID: $ANS-009.07

AMSAT area coordinator Clint Bradford, K6LCS, will be presenting his
"Working Amateur Satellites With Your HT" session at the February 1,
2011 meeting of the Murray State University Amateur Radio Club. ALL
are welcome to attend.

"MSUARC has been serving their region for fifty years," writes Clint.
"I am really looking forward to meeting the group!"

(Wait a sec - isn't Clint in California? What is he doing in
Kentucky? Too many frequent flier miles?)

Clint's out in Southern California - but has prepared a custom slide
show for MSUARC, which will be displayed as Skype handles the session's
audio. "I'd much rather be there in person - but this arrangement has
worked quite successfully in the past. We'll have a great time!"

Clint has full information on his web page:
http://www.work-sat.com

[ANS thanks Clint, K6LCS, for the above information]

/EX

SB SAT @ AMSAT $ANS-009.08
ARISS School Contacts Resume for 2011

AMSAT News Service Bulletin 009.08
From AMSAT HQ SILVER SPRING, MD.

January 9, 2011
To All RADIO AMATEURS
BID: $ANS-009.08

ARISS Operations Team Mentor Charlie Sufana, AJ9N noted that the school contact schedule is being resumed following the recent crew change on board the International Space Station. The Expedition 26 crew current on orbit includes Dmitry Kondratyev, Catherine G. Coleman, KC5ZTH and Paolo Nespoli, IZ�JPA.

The first school contact occurred on Saturday, January 8 with the Universit� degli studi di Bari "Cittadella Mediterranea della Scienza", Bari, Ba, Italy, direct via IZ7EVR.

Additional school contacts continue with this planned schedule:

Wednesday January 12 08:08:20 UTC
Tsutsujigaoka Minami Elementary School in Akishima City (Tokyo), Japan, direct via 8J1TME

Wednesday January 12 10:54:52 UTC
Istituto Comprensivo Marco Polo-Viani Scuola Secondaria 1° Grado, Viareggio, Lucca, Italy, and Istituto Suore Mantellate, Viareggio, Lucca, Italy direct via IZ5PVC. Simulcast on:
http://www.versiliawebtv.it/streaming/reteversilia.html

Saturday January 15 09:02:16 UTC
Istituto Comprensivo Via Toscana 2 Civitavecchia, Roma, Italy, direct via IK�WGF. Simulcast on:
http://www.livestream.com/AMSAT_Italia

The Total number of ARISS ISS to earth school contacts is 565.

ARISS has posted a frequency chart for packet, voice, and cross band repeater modes showing Doppler correction at:
http://www.amsat.org/amsat/ariss/news/ISS_frequencies_and_Doppler_correction.rtf (careful with the line wrap).

Finally, astronauts Michael Fossum, KF5AQG, and Satoshi Furukawa, KE5DAW, are scheduled for ARISS prebrief sessions this month. Both are scheduled to fly with Expedition 28 in June 2011.

[ANS thanks ARISS Mentor Charlie, AJ9N, and Carol, KB3LKI, for the above information]

/EX

SB SAT @ AMSAT $ANS-009.09
AMSAT-UK's John Heaton, G1YYH Silent Key

AMSAT News Service Bulletin 009.09
From AMSAT HQ SILVER SPRING, MD.
January 9, 2011
To All RADIO AMATEURS

BID: $ANS-009.09

AMSAT-UK Hon Sec Jim G3WGM wrote, "It is with a heavy heart that I have to report the death of AMSAT-UK committee member John Heaton, G1YYH. He died in hospital in Manchester UK on Christmas Eve, having been admitted two weeks earlier. He had not been well for several months prior to his death."

"John was the AMSAT-UK Webmaster for many years, and a regular attender at the annual AMSAT-UK Colloquium. He always gave his time and considerable expertise very generously. He will be terribly missed by his friends and colleagues. He was a real gentleman."

[ANS thanks AMSAT-UK and Jim, G3WGM, for the above information]

/EX

SB SAT @ AMSAT $ANS-009.10
Vietnam CubeSat to Launch in 2011

AMSAT News Service Bulletin 009.10
From AMSAT HQ SILVER SPRING, MD.
January 9, 2011
To All RADIO AMATEURS
BID: $ANS-009.10

Satellite news carried on the SouthGateARC news site reported that a Vietnamese Amateur Radio CubeSat, F-1, is slated for launch towards the end of next year.

The F-1 CubeSat will carry 2 independent transceivers (Yaesu VX-3R & MHX L400) using amateur radio 145 and 437MHz bands. The transmission speed will be 1200bps and higher using FM AFSK & GMSK modulation, AX.25, KISS protocol. It will carry a low resolution C328 camera with 640x480 resolution.

The IARU satellite frequency coordination committee have agreed a downlink frequency of 437.485MHz and it is hoped to launch in the 4th quarter of 2011.

Vietnam F-1 CubeSat on Facebook
http://www.facebook.com/group.php?gid6436068290

F-1 on IARU Satellite Frequency Coordination pages
http://www.amsatuk.me.uk/iaru/
finished_detail.php?serialnum0

[ANS thanks the SouthGateARC News site for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor, wishing everyone a happy new year,
Lee McLamb, KU4OS

15. AMSAT Weekly Satellite Report

Newsgroup: rec.radio.amateur.space
Date: 2011-01-11 14:47:32 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <000e01cbb19e$71a37d00$54ea7700$@net>
Source record: 441
Cross-posted to: rec.radio.amateur.space,rec.radio.info

```
This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-010.S1
WSR 010 Part 1 01/10/2011

AMSAT NEWS SERVICE BULLETIN 010.S1
FROM AMSAT HQ SILVER SPRING, MD, January 10, 2011
TO ALL RADIO AMATEURS
BID: $WSR-010.S1

HO-68 HOPE-1 (CAS-1)(XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009
Status: By schedule

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
145.9250 - 145.9750 MHz SSB/CW
145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
435.7650 - 435.7150 MHz SSB/CW
435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[01102011]
=====
SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009
```

Status: By schedule

Callsign: ZS0SUM

Uplink: 145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/
[01102011]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[09062010]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05,2005

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.9360 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[09062010]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Mode(s):
Voice repeater: V/u
Uplink: 145.920 MHz FM
Downlink: 435.300 MHz FM

Telemetry: By Command ONLY
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.880 MHz FM
145.920 MHz FM
145.920 MHz FM - 67 Hz PL tone burst
1268.705 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.705 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[01022011]
=====
SO-50 SAUDISAT-1C

Catalog number: 27607
Launch date: December 20, 2002

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4
Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the re-
peater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
the 10 minute timer.
[09062010]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[09062010]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B

Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
145.972 MHz CW
435.100 MHz CW
2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[09062010]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - OFF
APRS - OFF
SSTV - OFF

Expedition 26 Crew:
Commander: Scott Kelly
Flight Engineer: Alexander Kaleri U8MIR
Flight Engineer: Oleg Skripochka RN3FU
Flight Engineer: Dmitry Kondratyev
Flight Engineer: Catherine Coleman KC5ZTH
Flight Engineer: Paolo Nespoli IZ0JPA

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[12172010]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-010.S2
WSR 010 Part 2 01/10/2011

AMSAT NEWS SERVICE BULLETIN 010.S2
FROM AMSAT HQ SILVER SPRING, MD, January 10, 2011
TO ALL RADIO AMATEURS
BID: $WSR-010.S2

O/OREOS
Catalog Number: 37224
Launch Date: November 20, 2010

Status: On Orbit

Uplink:
Downlink: 437.035 MHZ AX.25

Beacon:

Callsign:

URL: http://www.ooreos.org/
[11302010]
=====
Rax-1 Radio Aurora Explorer
Catalog Number: 37223
Launch Date: November 19. 2010

Status: On Orbit

Uplink:
Downlink: 437.505 MHz 9k6 GMSK

Beacon:

Callsign: RAX-1

URL: http://rax.engin.umich.edu/
[11302010]
=====
Fastrac-1 Sara Lily
Catalog Number: 37225
Launch Date: November 19, 2010

Status: On orbit

Uplink 1: 145.980 MHz 1k2 baud
Uplink 2: 145.825 MHz 1k2 baud
Downlink: 437.345 MHz 1k2 and 8k6 baud

Beacon: 437.435 MHz 1k2 AX.25

Callsign: Fast1

URL: http://fastrac.ae.utexas.edu/index.php
[01102011]
=====
Fastrac-2 Emma
Catalog Number: 37227
Launch Date: November 19, 2010

Status: On Orbit

Uplink 1: 435.025 MHz 1k2 baud
Uplink 2: 437.435 MHz 9k6 baud
Downlink: 145.825 MHz

Beacon: 145.825 MHz 1k2 AX.25

Callsign: Fast2

URL: http://fastrac.ae.utexas.edu/index.php
[01102011]
=====
StudSat
Catalog Number: 36796
Launch Date: July 12, 2010
Status: On Orbit

Uplink: 437.505MHz, 9600bps FSK
Downlink: 437.505MHz, 9600bps FSK
Beacon : 437.505MHz, 20bps ASK
[08062010]
=====

TIsat-1
Catalog Number: 36799
Launch Date: July 12, 2010

Status: On orbit

Callsign: HB9DE

Uplink: 145.980MHz FM, AFSK
Downlink: 437.305MHz FM, AFSK
Beacon: 437.305MHz CW
[08062010]
=====
HO-68 HOPE-1 (CAS-1)(XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009

Status: By schedule

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
145.9250 - 145.9750 MHz SSB/CW
145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
435.7650 - 435.7150 MHz SSB/CW
435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[01102011]
=====
SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009

Status: Operational

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w): 437.5050MHz FSK 1k2bps
[04222010]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
437.3850 MHz FSK 9k6bps
[1112009]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009

Status: Operational

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps
[11112009]
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009

Status: Operational

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
Beacon(500mw): 436.000MHz GMSK 9k6bps
[04222010]
=====
CP-6
Catalog Number: 35003
Launch Date: May 19, 2009

Status: Operational

Downlink: 437.365 MHz 1k2 AFSK
[09062010]
=====
HAWKSAT 1
Catalog number: 35004
Launch Date: May 19, 2009

Status: operational

Downlink: 437.345 MHz ?
[09062010]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009
Status: Operational

Downlink: 437.465 MHz 1k2 AFSK
[09062010]
=====

ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009

Status: ?

Downlink: 435.000 MHz
Uplink: 145.800 MHz

Telemetry: 137.400 MHz
[09062010]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009

Status: Operational

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon: 437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[09062010]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495
Launch Date: January 23, 2009

Status: In Orbit

Downlink: 437.375 MHZ FSK9k6/CW
Beacon: 437.375 MHz FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[09062010]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
437.465 MHz FM/CW
Beacons: 437.305 MHz FM/CW
437.275 MHz FM/CW

Callsigns: JR5YBN
JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[09062010]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009

Status: Operational

Downlink: 437.455 MHz AFSK/CW
Beacon: 437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[09062010]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon: 437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[09062010]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008

Status: Operational

Curent Modes: Telemetry
Audio
Images

Downlinks: 435.315 MHz
435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[09062010]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web
page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[09062010]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[09062010]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008

Status: Digipeater

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL
=/satellites/status.php
[09062010]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008

Status: Operational

Current Mode: 4k8 MSK packet

Uplink: 145.980 MHz FM
Downlink: 437.275 Mhz CW
437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[09062010]
=====
CO-66 Seeds II
Catalog number: 32791
Launch Date: April 28, 2008

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web
page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL
=/satellites/status.php
[09062010]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[09062010]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[09062010]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm

[09062010]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003

Status: ?????

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[09062010]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004

Status: Operational

Current Mode(s):
Voice repeater: V/u
Uplink: 145.920 MHz FM
Downlink: 435.300 MHz FM

Telemetry:
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.880 MHz FM
145.920 MHz FM
145.920 MHz FM - 67 Hz PL tone burst
1268.700 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.708 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear

V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[12172010]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[10042010]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003

Status: Operational

Current Mode: CW downlink worldwide
AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php
[09062010]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[09062010]
=====
RS-22 RADIO SPORT 22
Catalog number: 27939
Launch Date: September 27, 2003

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[09062010]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
145.860 MHz 1200-baud Manchester FSK
145.880 MHz 1200-baud Manchester FSK
145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[09062010]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984

Status: Operational

Current Mode: /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz
Mode-S Beacon: 2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[11062010]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - OFF
APRS - OFF
SSTV - OFF

Expedition 26 Crew:
Commander: Scott Kelly
Flight Engineer: Alexander Kaleri U8MIR
Flight Engineer: Oleg Skripochka RN3FU
Flight Engineer: Dmitry Kondratyev
Flight Engineer: Catherine Coleman KC5ZTH
Flight Engineer: Paolo Nespoli IZ0JPA

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[121702010]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-010.S3
WSR 010 Part 3 01/10/2011

AMSAT NEWS SERVICE BULLETIN 010.S3
FROM AMSAT HQ SILVER SPRING, MD, January 10, 2011
TO ALL RADIO AMATEURS
BID: $WSR-010.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

CP4
Catalog Number: 31132
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[09062010]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[09062010]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[09062010]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.250

Official Website: http://www.ncube.no
[09062010]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink 2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[09062010]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[09062010]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks: 145.850 MHz
145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks

V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON General Beacon(GB) Middle Beacon(MB) Engineering Beacon(EB)
2 m none 145.898 MHz none
70cm 435.438 MHz 435.588 MHz 435.838 MHz
13cm(1) 2400.188 MHz 2400.338 MHz 2400.588 MHz
13cm(2) 2401.173 MHz 2401.323 MHz 2401.573 MHz
3cm 10450.975 MHz 10451.125 MHz 10451.375 MHz
1.5cm 24047.885 MHz 24048.035 MHz 24048.285 MHz
[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
145.890 FM
145.930 FM
1269.700 FM
1269.800 FM
1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[07172010]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink: 435.1380 MHz AFSK 1200 BPS
Downlink: 435.2060 MHz AFSK 1200 BPS
Uplink: 145.8150 MHz AFSK 1200 BPS
Uplink: 145.8350 MHz AFSK 1200 BPS
Uplink: 145.8550 MHz AFSK 1200 BPS
Uplink: 145.8750 MHz AFSK 1200 BPS
[06042009]
=====
FO-29 JAS-2
Catalog number: 24278

Launch Date: August 17, 1996

Status: Non-operational
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
145.870 MHz FM
145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[11062010]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====

IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks: 145.875 MHz FM 1200-baud
145.900 MHz FM 1200-baud
145.925 MHz FM 1200-baud
145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink: 435.0625 MHz FM 1k2bps AFSK
435.1125 MHz FM 1k2bps AFSK
435.1375 MHz FM 1k2bps AFSK
Downlink: 145.9750 MHz FM 1k2bps AFSK
2446.5025 MHz FM 1k2bps AFSK

Beacon: 2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT

Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink: 435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons: 435.795 MHz CW
435.910 MHz AX25

Voice Transponder:
Uplink: 145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks: 145.850 MHz
145.870 MHz
145.890 MHz
145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode: V/u

Uplink: 145.900 MHz FM 1200-baud Manchester FSK (reserved)
145.920 MHz FM VOICE
145.940 MHz FM 1200-baud Manchester FSK (reserved)
145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink: 437.026 MHz USB VOICE
(1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink: 145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink: 145.8500 MHz MFSK 1200 BPS
Uplink: 145.8700 MHz MFSK 1200 BPS
Uplink: 145.8900 MHz MFSK 1200 BPS
Uplink: 145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703

Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.8500 - 145.9000 MHz SSB/CW
Downlink 29.4000 - 29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink: 29.4500 - 29.5500 MHz SSB/CW
Beacons: 29.450 MHz
435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink: 145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB

Beacon 1: 29.352 MHz (intermittent)
Beacon 2: 29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-010.S4
WSR 010 Part 4 01/10/2011

AMSAT NEWS SERVICE BULLETIN 010.S4
FROM AMSAT HQ SILVER SPRING, MD, January 10, 2011
TO ALL RADIO AMATEURS
BID: $WSR-010.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Re-entered
Re-entered:

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[09062010]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 437.325 MHz 9k6 GMSK
437.325 MHz CW 20wpm
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 436.250 MHz 9k6 FHSS
[11112009]
=====
Pollux
Catalog Number: 35693
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25
[09062010]
=====
Castor (ANDE-2)
Catalog Number: 35694
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25
[09062010]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Re-Entered
Re-entered date: August 8, 2010

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[08082010]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)

* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at} amsat.org
NNNN
/EX

16. ANS-016 AMSAT News Service Weekly Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2011-01-17 20:48:34 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <001701cbb687$e2bbf4c0$a833de40$@net>
Source record: 442
Cross-posted to: rec.radio.amateur.space,rec.radio.info

AMSAT NEWS SERVICE
ANS-016

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* Satellite Protocol
* ARISSat-1 Update
* SKN Reminder
* SA AMSAT Cubesat project needs programmers
* ARISS Report
* NASA Redoubling Efforts to Contact Spirit Rover on Mars
* Satellite Shorts
* AMSAT China Report on HO-68 Health

SB SAT @ AMSAT $ANS-016.01
Satellite Protocol

AMSAT News Service Bulletin 016.01
From AMSAT HQ SILVER SPRING, MD.
January 16, 2011
To All RADIO AMATEURS
BID: $ANS-016.01

Recently, there has been comments on activity on the LEO satellites. With newcomers added to the mixture everyday, it is a good idea to re-read a Guideline from many years ago.

http://www.innismir.net/article/26

Enjoy and use as a reminder of our resposibilities.

[ANS thanks Drew, KO4MA, for the above information]

/EX

SB SAT @ AMSAT $ANS-016.02
ARISSat-1 Update

AMSAT News Service Bulletin 016.02
From AMSAT HQ SILVER SPRING, MD.
January 16, 2011
To All RADIO AMATEURS
BID: $ANS-016.02

The ARISSat-1 satellite/amateur radio experiment is in Baikonur.
RSC Energia has information and photographs about the satellite
on their news site:
http://www.energia.ru/en/news/news-2010/news_12-31.html

The NASA Phase 3 Safety Review for ARISSat is scheduled for Thurs-
day 20 January 2011. The Progress 41P launch carrying ARISSat-1/
RadioSkaf-V is scheduled for late January and the release of the sat-
ellite is scheduled for the end of February 2011.

Energia is also calling the satellite KEDR, after Yuri Gagarin's call
sign in celebration of the 50th anniversary of the first manned space
flight 12 April 1961. Sergey Samburov, RV3DR is shown in the photos
with the satellite on the RSC Energia site.

[ANS thanks ARISSat-1 Project Manager Gould Smith, WA4SXM, for the
above information]

/EX

SB SAT @ AMSAT $ANS-016.03
SKN reminder

AMSAT News Service Bulletin 016.03
From AMSAT HQ SILVER SPRING, MD.
January 16, 2011
To All RADIO AMATEURS
BID: $ANS-016.03

Ray, W2RS thanks all who participated in AMSAT's Straight Key Night
on OSCAR 2011 and reminds us to please nominate someone you worked
for 'Best Fist.' Your nominee need not have the best fist of those
you heard, just of those you worked. Nominations should be sent to
w2rs@amsat.org. A list of those nominated will be published in ANS
in early February, and in a forthcoming issue of The AMSAT Journal.

[ANS thanks Ray, W2RS, for the above information]

/EX

SB SAT @ AMSAT $ANS-016.04
SA AMSAT Cubesat project needs programmers

AMSAT News Service Bulletin 016.04
From AMSAT HQ SILVER SPRING, MD.
January 16, 2011
To All RADIO AMATEURS
BID: $ANS-016.04

The development team for the planned South African CubeSat project is taking shape nicely.

Radio amateurs with diverse specialist skills are offering their expertise from all over. "However, we still need a person with experience in programming PIC or 8051 microprocessors," Hannes Coetzee, ZS6BZP, told SARL News.

"This person will be a critical member of the team and will be responsible for the development of the onboard controller software. Other amateurs who are interested in the development of the satellite and would like to join the development team are still welcome to send their Amateur Radio CVs to: saamsat@intekom.co.za," Hannes said.

The team will meet for its first formal teleconference on Wednesday evening 26 January 2011 at 20:00. Team members will receive a formal notification.

[ANS thanks SARL, SA AMSAT, and SouthGateARC site for the above information]

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SB SAT @ AMSAT $ANS-016.05
ARISS Report

AMSAT News Service Bulletin 016.05
From AMSAT HQ SILVER SPRING, MD.
January 16, 2011
To All RADIO AMATEURS
BID: $ANS-016.05

Amateur Radio on the International Space Station (ARISS)
Status Report January 10, 2011

1. Upcoming School Contacts

An Amateur Radio on the International Space Station (ARISS) contact scheduled for Tsutsujigaoka Minami Elementary School in Akishima, Tokyo, Japan on Wednesday, January 12 was completed. Students participating in the contact are learning about space science and the global cooperation required to operate the ISS.

An Amateur Radio on the International Space Station (ARISS) contact with Istituto Comprensivo Marco Polo-Viani Scuola Secondaria 1° Grado,

Viareggio, Lucca, Italy on Wednesday, January 12 has been completed. Through this contact, the school hoped to increase students' interest in science, technology, space research and other space-related subject matters.

Istituto Comprensivo Via Toscana 2 in Civitavecchia, Italy scheduled for an Amateur Radio on the International Space Station (ARISS) contact on Saturday, January 15 has also been successful. The school, with an

enrollment of 750 children, ages 3-14, had prepared questions about life

in space and the research performed on the ISS.

2. Italian Students Chat with Astronaut through ARISS Contact

On Saturday, January 8, University of Bari "Cittadella Mediterranea della Scienza" in Bari, Italy participated in an Amateur Radio on the International Space Station (ARISS) contact with ESA astronaut Paolo Nespoli, IZ0JPA. Prior to the contact, ARISS mentor Francesco De Paolis, IK0WGF introduced the event via phone line. Nespoli made the radio link with the students, answering 14 of their questions. A second contact was established on the following ISS pass to finish up the questions and exchange greetings. Approximately 100 students, teachers, visitors and media attended. Regional television, local media and newspapers covered the event and video was streamed over the internet, receiving more than 100 connections. Cittadella Mediterranea della Scienza

promotes technology and scientific knowledge in schools of all grades using projects that encourage academic research.

3. Astronaut Training Status

Astronaut Chris Cassidy was given an introductory session on ARISS this past week. He will train for his amateur radio license and plans to participate in the ARISS program. He is currently scheduled to fly in the spring of 2013.

4. ARRISat Featured in February QST

The American Radio Relay League (ARRL) posted a story in its January 6 ARRL Letter about the February issue of QST which features ARISSat-1 on its front cover. The ARRL monthly journal has a circulation of 156,000.
See: http://www.arrl.org/arrlletter?issue 11-01-06

5. AMSAT Posts ARISSat-1 Update to Web Site

The Radio Amateur Satellite Corporation (AMSAT) posted an update on its Web page covering the current status of ARISSat-1. "ARISSat-1/RadioSkaf-V Integration and Testing Underway in Moscow," may be viewed here:
http://www.amsat.org/amsat-new/index.php

6. AMSAT Articles on ARISS News

On January 9, the AMSAT (Radio Amateur Satellite Corporation) News Service bulletin (ANS-009) included two ARISS-related news items. "ARISSat-1/RadioSkaf-V Update" and "ARISS School Contacts Resume for 2011" may be found at:
http://www.amsat.org/amsat/archive/amsat-bb/48hour/msg83129.html

[ANS thanks Carol, KB3LKI, for the above information]

/EX

SB SAT @ AMSAT $ANS-016.06
NASA Redoubling Efforts to Contact Spirit Rover on Mars

AMSAT News Service Bulletin 016.06
From AMSAT HQ SILVER SPRING, MD.
January 16, 2011
To All RADIO AMATEURS
BID: $ANS-016.06

A news item carried on UniverseToday.com (http://tinyurl.com/2ccsnku) reports that NASA is stepping up operational efforts to contact the Martian Spirit rover with more communications commands; more listening time; more frequencies. Spirit last communicated with mission controllers back on Earth on March 22, 2010. The rover entered hibernation mode, some nine months ago, as the available sunlight to power the life giving solar panels was diminishing. NASA hopes to reawaken Spirit from a long slumber and reignite her breakthrough campaign of exploration and discovery from a scientific goldmine on the surface of the red planet.

At Spirit's location in the southern hemisphere of Mars, Southern Summer has not yet arrived. Right now it's mid Southern Spring and daylight hours are increasing. And Summer doesn't even start until mid-March 2011. The question is whether Spirit's unheated electronics components have endured the extremely harsh and frigidly cold conditions of her 4th winter on Mars - her coldest ever. At about -100 C.

Spirit entered a low-power fault mode in March 2010 with minimal activity except charging and heating the batteries and keeping its clock running. With most heaters shut off, Spirit's internal temperatures dipped lower than ever before on Mars. That stress could have caused damage, s uch as impaired electrical connections, that would prevent reawakening or, even if Spirit returns to operation, would reduce its capabilities.

"Components within the rover electronic module (REM) inside the rover's warm electronic box (WEB) are experiencing record low temperatures," said Doug McCuistion, the director of Mars Exploration at NASA Headquarters in Washington, DC, in an interview about Spirit's predicament. "The expectation is for the REM hardware to reach -55C at the coldest part of the winter. We have tested the REM down to -55C".

NASA's Deep Space Network of antennas in California, Spain and Australia

has been listening for Spirit daily in coordination with the spacecraft orbiting Mars; Mars Odyssey and Mars Reconnaissance Orbiter. In X-band, the DSN listens for Spirit during one pass each day. The rover team has also been sending commands to elicit a response from the rover even if the rover has lost track of time.

Now, the monitoring is being increased. Additional listening periods include times when Spirit might mistake a signal from NASA's Mars Reconnaissance Orbiter as a signal from Earth and respond to such a signal. Commands for a beep from Spirit will be sent at additional times to cover a wider range of times-of-day on Mars when Spirit might awaken.

"DSN does an average of 4 "sweep & beep" commands in each day's pass,"
according to JPL spokesman Guy Webster. Also, NASA is listening on a
wider range of frequencies to cover more possibilities of temperature
effects on Spirit's radio systems.

[ANS thanks UniverseToday.com for the above information]

SB SAT @ AMSAT $ANS-016.07
Satellite Shorts

AMSAT News Service Bulletin 016.07
From AMSAT HQ SILVER SPRING, MD.
January 16, 2011
To All RADIO AMATEURS
BID: $ANS-016.07

+ The next "HV Satcom" Net is Thursday January 20 at 8PM (UTC -5);
(Host) Mt. Beacon ARC) on the 146.970MHz. Repeater (-600;Pl;100)
with an Echolink Node of "N2EYH-L" ("HV Satcom"net): www.hvsatcom.org/
E-Mail: wa2aqh@amsat.org ("HV Satcom"Net)

+ January SatMagazine Covers CubeSats

Amateur Radio satellites NanoSail-D and O/OREOS get a mention in the
January edition of SatMagazine, now available for free download.

NanoSail-D and O/OREOS feature on pages 61/62.

Pages 14-18 have a article by Surrey Satellite Technologies Ltd.
(SSTL) project lead Shaun Kenyon on the recent increase in interest
in NanoSats and pages 20-22 cover "The Power Of Picosatellites".

The US military are making use of NanoSats and the recently launched
US Army satellite SMDC-ONE, a 3U CubeSat, is covered on page 60.

Download a copy of the January SatMagazine from
http://www.satmagazine.com/2011/SM_January_2011.pdf

Free subscription to SatMagazine and SatNews
http://www.satnews.com/cgi-bin/regester.cgi

SatMagazine
http://www.satmagazine.com/

[ANS thanks the SouthGateARC Site and the HVSatCom Net for the above
information]

/EX

SB SAT @ AMSAT $ANS-016.08
AMSAT China Report on HO-68 Health

AMSAT News Service Bulletin 016.08
From AMSAT HQ SILVER SPRING, MD.
January 16, 2011
To All RADIO AMATEURS

BID: $ANS-016.08

AMSAT China Report on HO-68 Health

HO-68 (XW-1) Project Manager, Alan Kung, BA1DU sent an update on the satellite's operational status. Alan wrote, "This week I received many reports from all over the world about faults of HO-68's telemetry beacon."

Alan continues, "After we analyzed the situation of the satellite, we think that the software in the payload management MPU was not running properly. Software crashes stopped communication between the payload management MPU and the satellite management unit. This caused the problem with the beacon and caused an abnormal switch of the transponder mode."

On January 14 AMSAT China controllers switched the satellite into safe mode at 0300Z. They turned off most of the onboard units, and then at 0440Z re-powered up. The satellite returned to normal operating mode and so far the beacon has continued to operate normally.

AMSAT China said they will not upload commands to the satellite to change the transponder operating schedule for the next week. The command team will continually monitor HO-68 operational status this week. Please send Alan a report if you observe any abnormal operation of HO-68.
Alan can be reached at: alankung@public3.bta.net.cn

AMSAT China web page: http://www.camsat.cn

[ANS thanks Alan Kung, BA1DU for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor
Dee Interdonato, NB2F

17. BETS HOT PHOTOS & VIDEOS

Newsgroup: rec.radio.amateur.space
Date: 2011-01-22 05:50:51 UTC
From: devi <satyamsivam9030@gmail.com>
Message-ID: <16621834-7671-40be-9173-0112ab51ea5f@e16g2000pri.googlegroups.com>
Source record: 443

DEEPIKA PADUKONE HOT VIDEOS
http://karomasti9.blogspot.com/2011/01/deepika-padukone.html
HOT ARCHANA STILLS
http://karomasti9.blogspot.com/2011/01/archana.html
DEEKSHA SETH HOT WALLPAPERS
http://karomasti9.blogspot.com/2011/01/deeksha-seth.html
KATRINA KAIF HOT VIDEOS&PHOTOS
http://karomasti9.blogspot.com/2011/01/katrina-kaif.html
SAMEERAREDDY HOT BOOBS
http://karomasti9.blogspot.com/2011/01/sameerareddy.html
HOT SEXY ACTRESS
http://karomasti9.blogspot.com/2011/01/hot.html
latest hot sruthi hassan stills
http://karomasti9.blogspot.com/2011/01/shurthihassan-new-stills.html
UNSEEN HOT SEXY PHOTOS
http://karomasti9.blogspot.com/2011/01/never.html
SAMANTHA HOT SEXY PHOTOS
http://karomasti9.blogspot.com/2011/01/samantha.html
SEXY DIYA MIRZA
http://karomasti9.blogspot.com/2010/12/diya-mirza.html
HOT AISHWARIYA RAI
http://karomasti9.blogspot.com/2010/12/aish.html
priyamani hot&sexy photos
http://karomasti9.blogspot.com/2010/12/priyamani.html
KATRINA SEXY PHOTOS
http://karomasti9.blogspot.com/2010/12/katrina.html
ANUSHKA HOT PHOTOS
http://karomasti9.blogspot.com/2010/12/anuska.html
BEAUTIFUL AISHWARIYA RAI
http://karomasti9.blogspot.com/2010/12/aiesh.html
TRISHA HOT PHOTOS
http://karomasti9.blogspot.com/2010/11/trisha-hot.html
AMISHAPATEL HOT VIDEOS
http://karomasti9.blogspot.com/search/label/amisha
HANSIKHA HOT SEXY PHOTOS
http://karomasti9.blogspot.com/search/label/HANSIKA
HOT SEXY COLLEGE GIRLS
http://karomasti9.blogspot.com/search/label/hot
BEAUTIFUL LARADATTA
http://karomasti9.blogspot.com/search/label/laradatta
NIKISHA HOT BOOBS
http://karomasti9.blogspot.com/search/label/nikisha
PRIYANKA SPICY LATEST PICS
http://karomasti9.blogspot.com/search/label/priyanka

ONLY FOR YOUTH
http://karomasti9.blogspot.com/search/label/spicy
SRILEKHA UNSEENED PHOTOS
http://karomasti9.blogspot.com/search/label/Srilekha
CHOPRA UNBELIVABLE PHOTOS
http://karomasti9.blogspot.com/search/label/chopra
HOT BIPASA BASU PHOTOS
http://karomasti9.blogspot.com/search/label/bipasa
TRISHA IN A SEXY FEEL
http://karomasti9.blogspot.com/search/label/thrisha
SRISHA HOT BOOBS SHOW
http://karomasti9.blogspot.com/search/label/srisha
BEAUTIFUL POONAM PHOTOS
http://karomasti9.blogspot.com/search/label/poonam

18. ANS-023 AMSAT News Service Weekly Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2011-01-23 02:20:26 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <002101cbbaa3$5ac9c7c0$105d5740$@net>
Source record: 444
Cross-posted to: rec.radio.amateur.space,rec.radio.info

AMSAT NEWS SERVICE
ANS-023

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

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* AO-51 Power Management Update
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* Marshall Amateur Radio Club Confirms NanoSail-D Beacon Active
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SB SAT @ AMSAT $ANS-023.01
ARISSat-1 Loaded Aboard Progress-41P for Launch on January 28

AMSAT News Service Bulletin 023.01
>From AMSAT HQ SILVER SPRING, MD.
January 23, 2011
To All RADIO AMATEURS
BID: $ANS-023.01

The ARISSat-1 space craft is mounted in the Progress vehicle at Baikonur and the hatch sealed. Progress 41P is scheduled to lift off next Friday, 28 January 2011. Due to the launch of STS-133, the EVA to deploy ARISSat-1 has been moved up to 16 February 2011.

The NASA Phase 3 Safety Review for ARISSat-1 was held Thursday morning, 19 Jan 2011 in Houston. There were three items that did not have complete paperwork; Energia and the US teams are working to clear this up by early next week.

A NASA press release describes the plans for ARISSat-1 in an article about planned Russian EVAs from the ISS: http://tinyurl.com/6kceotn (nasa.gov)

Bob, N4HY reports that NASA TV (http://www.nasa.gov/ntv) has run a program featuring ARISSat-1. Watch for repeat playback.

[ANS thanks ARISSat-1 Project Manager Gould Smith, WA4SXM, and NASA for the above information]

/EX

SB SAT @ AMSAT $ANS-023.02
AO-51 Power Management Update

AMSAT News Service Bulletin 023.02
>From AMSAT HQ SILVER SPRING, MD.
January 23, 2011
To All RADIO AMATEURS
BID: $ANS-023.02

AO-51 Control Operator, Mark Hammond, N8MH reported this week, "The satellite continues to be in good operating condition thanks to good power management."

The Control Team continues to make adjustments and refinements in the specific settings. While AO-51 is in the sun its downlink power output remains strong at around 1.3 W output. The transmitters are OFF while in eclipse.

The current schedule is planned to continue through the end of February 2011, when the satellite will return to full sunlight again. The current AO-51 operating mode is:

Single FM Repeater:
Uplink: 145.920 MHz FM
Downlink: 435.300 MHz FM

The AO-51 Command Team requests that users continue to post their observations of AO-51's operating condition on the Live OSCAR Satellite Status Page: http://oscar.dcarr.org/index.php.

Keep up to date with the latest Command Team and Operations Group AO-51 News at: http://www.amsat.org/amsat-new/echo/CTNews.php

[ANS thanks Mark, N8MH, for the above information]

/EX

SB SAT @ AMSAT $ANS-023.03
NanoSail-D Feared Lost Now Active - Amateur Radio Reports Requested

AMSAT News Service Bulletin 023.03
>From AMSAT HQ SILVER SPRING, MD.
January 23, 2011
To All RADIO AMATEURS

BID: $ANS-023.03

[Editor note: The NanoSail-D satellite launched with the NASA FASTSAT mission from Kodiak. It had appeared to not have been ejected and subsequently not activated. This week NASA said that telemetry from FASTSAT now indicated that NanoSail-D was now active and issued the following press release.]

NANOSAIL-D EJECTS; NASA SEEKS AMATUER RADIO OPERATORS' AID TO LISTEN FOR BEACON SIGNAL

HUNTSVILLE, Ala. - Wednesday, Jan. 19 at 11:30 a.m. EST, engineers at Marshall Space Flight Center in Huntsville, Ala., confirmed that the NanoSail-D nanosatellite ejected from Fast Affordable Scientific and Technology Satellite, FASTSAT. The ejection event occurred spontaneously and was identified this morning when engineers at the center analyzed onboard FASTSAT telemetry. The ejection of NanoSail-D also has been confirmed by ground-based satellite tracking assets.

Amateur ham operators are asked to listen for the signal to verify NanoSail-D is operating. This information should be sent to the NanoSail-D dashboard at: http://nanosaild.engr.scu.edu/dashboard.htm. The NanoSail-D beacon signal can be found at 437.270 MHz.

The NanoSail-D science team is hopeful the nanosatellite is healthy and can complete its solar sail mission. After ejection, a timer within NanoSail-D begins a three-day countdown as the satellite orbits the Earth. Once the timer reaches zero, four booms will quickly deploy and the NanoSail-D sail will start to unfold to a 100-square-foot polymer sail. Within five seconds the sail fully unfurls.

"This is great news for our team. We're anxious to hear the beacon which tells us that NanoSail-D is healthy and operating as planned", said Dean Alhorn, NanoSail-D principal investigator and aerospace engineer at the Marshall Center. "The science team is hopeful to see that NanoSail-D is operational and will be able to unfurl its solar sail."

On December 6, 2010, NASA triggered the planned ejection of NanoSail-D from FASTSAT. At that time, the team confirmed that the door successfully opened and data indicated a successful ejection. Upon further analysis, no evidence of NanoSail-D was identified in low-Earth orbit, leading the team to believe NanoSail-D remained inside FASTSAT.

The FASTSAT mission has continued to operate as planned with the five other scientific experiments operating nominally.

"We knew that the door opened and it was possible that NanoSail-D could eject on its own," said Mark Boudreaux, FASTSAT project manager at the Marshall Center. "What a pleasant surprise this morning when our flight operations team confirmed that NanoSail-D is now a free flyer."

If the deployment is successful, NanoSail-D will stay in low-Earth orbit between 70 and 120 days, depending on atmospheric conditions. NanoSail-D is designed to demonstrate deployment of a compact solar sail boom system that could lead to further development of this alternative solar sail propulsion technology and FASTSAT's ability to eject a nano-satellite from a micro-satellite - while avoiding re-contact with the FASTSAT satellite bus.

Follow the NanoSail-D mission operation on Twitter at:
http://twitter.com/nanosaild

For additional information on the timeline of the NanoSail-D deployment visit:
http://www.nasa.gov/pdf/501204main_NSD2_timeline_sequence.pdf

To learn more about FASTSAT and the NanoSail-D missions visit:
http://www.nasa.gov/mission_pages/smallsats

NanoSail-D is predicted to be visible once the sail is unfurled. The site at http://www.heavens-above.com has a link for the predicted viewing times and sky coordinates to find NanoSail-D at your location.

[ANS thanks Dave Taylor, W8AAS and the NASA Marshall Space Flight Center for the above information]

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SB SAT @ AMSAT $ANS-023.04
Marshall Amateur Radio Club Confirms NanoSail-D Beacon Active

AMSAT News Service Bulletin 023.04
>From AMSAT HQ SILVER SPRING, MD.
January 23, 2011
To All RADIO AMATEURS
BID: $ANS-023.04

The Marshall Amateur Radio Club, WA4NZD late Wednesday afternoon, January 19, 2011, confirmed ejection of the NanoSail-D sub-satellite. This loaf-of-bread sized spacecraft was carried to orbit late last year on an Air Force rocket as part of NASA's FastSat project. This is the first successful deployment of a satellite, launched from a satellite already in orbit! The only communication from the NanoSail-D vehicle is via ham radio with 1200 baud FM AX25 beacon packets.

The WA4NZD team of N4PMF and WB5RMG, was listening on 437.275 MHz FM with the NanoSail-D Principal Investigator Dean Alhorn at the club station when the beacon was heard and susbequently decoded onto the screen. Please visit http://wa4nzd.wordpress.com for pictures and more links to the NanoSail-D project. They are asking for telemetry reception reports from all over the world to help fill in gaps. The battery is expected to last for only three days.

The NanoSail-D mission page contains the latest tracking data and
a link to report received packet telemetry data:
http://nanosaild.engr.scu.edu/dashboard.htm

Details on the format of the packet data downlink are presented in
a PDF document at: http://tinyurl.com/6497q84 (scu.edu).

An example of received packets from NanoSail-D:
Fm KE7EGC To UNDEF Via TELEM <UI pid Lend >[22:55:45]
NanoSailD.org 8C0F0000A21400000004008A890200004939C37ACFC0000000

UniverseToday.com also carried a story: http://tinyurl.com/4etefaa
In another story on UniverseToday the NanoSail-D data capture video
by Henk, PA3GUO is featured at:
http://www.universetoday.com/82733/success-nanosail-d-deploys/

John, VE8EV wrote from Inuvik, Canada to provide a link describing
his successful telemetry capture to confirm the deployment of the
NanoSail-D solar sail:
http://ve8ev.blogspot.com/2011/01/nanosat-d-sailing-new-sea.html
This page describes a novel approach to decoding telemetry by using
an Excel spreadsheet.

AMSAT's Keeper of the Keps, Ray Hoad, WA5QGD says the KEPs for
NANOSAIL-D are now being updated with the label NANOSALD.

[ANS thanks Alan Sieg, WB5RMG and the Marshall Amateur Radio Club,
WA4NZD; John, VE8EV, and UniverseToday.com for the above information]

/EX

SB SAT @ AMSAT $ANS-023.05
January AMSAT India Newsletter - CubeSat Transponder Announced

AMSAT News Service Bulletin 023.05
>From AMSAT HQ SILVER SPRING, MD.
January 23, 2011
To All RADIO AMATEURS
BID: $ANS-023.05

This week AMSAT India Secretary Nitin, VU3TYG announced that the
AMSAT India January 2011 news letter is available for download.
The PDF of the newsletter is at:
http://amsatindia.org/Newsletter/AMSATINDIA-News-January2011.pdf

This month's newsletter includes an announcement by AMSAT India
Technical Director Pop, VU2POP, regarding the latest developments
with their CubeSat transponder. Pop wrote, "I have immense pleasure
in announcing that the initial design of the transponder has been
completed and the components have been procured."

Features of the AMSAT India CubeSat transponder include:

+ 435.250 MHz uplink and downlink, half-duplex UHF narrow-band FM
transceiver.

+ FSK/MSK baseband for 1200-9600 baud operation.
+ Supports AX.25 or user-defined frame formats supported
+ Transmitter output power 1 Watt
+ Super heterodyne receiver with Packet reception sensitivity to
-120 dBm at 1200 bps
+ On-board measurement of TXO and PA temperatures, battery voltage,
and RSSI and RF-error on receiver
+ Downlink of configurable content (text and measurements)
+ Autonomous audio Morse beacon when idle
+ Compatible with the Cube sat Kit "PC104" form factor with the first
set of PCBs ordered for the engineering model

Pop concluded, "Thanks to my team for their great focus in spite of
their busy schedule and Ganesan (KJ6LRR) for his efforts in this baby
step which we have taken in this domain. Look out for more updates in
our future News letters."

The full list of specifications and an engineering CAD drawing of the
CubeSat transponder PCB can be found in the AMSAT India January
newsletter link. The newsletter archives can be obtained on-line at:
http://www.amsatindia.org/Newsletter

[ANS thanks AMSAT India for the above information]

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SB SAT @ AMSAT $ANS-023.06
ESA Astronaut Paolo Nespoli Speaks with Italian Youth via ARISS

AMSAT News Service Bulletin 023.06
>From AMSAT HQ SILVER SPRING, MD.
January 23, 2011
To All RADIO AMATEURS
BID: $ANS-023.06

On Saturday, January 15, students attending the Istituto Comprensivo
Via Toscana 2 in Civitavecchia, Italy took part in an Amateur Radio
on the International Space Station (ARISS) contact with ESA astronaut
Paolo Nespoli, IZ&#65533;JPA.

Nespoli answered 12 questions during the first ISS pass. On the
following pass, he completed the students' questions and exchanged
greetings with Italian Space Agency President Enrico Saggese. Nespoli
also talked about the importance of school contacts as well as the
10th anniversary of ARISS contacts in both Italian and English. The
event was attended by 300 people and was covered by national tele-
vision and other media.

[ANS thanks Carol Jackson, KB3LKI and the January 17, 2011 ARISS
Status Report for the above information]

/EX

SB SAT @ AMSAT $ANS-023.07
Last Call: OSCAR SKN Best Fist Nominations Are Due

AMSAT News Service Bulletin 023.07
>From AMSAT HQ SILVER SPRING, MD.
January 23, 2011
To All RADIO AMATEURS
BID: $ANS-023.07

Ray, W2RS thanks all who participated in AMSAT's Straight Key Night on OSCAR 2011. Please remember to nominate someone you worked for 'Best Fist.' Your nominee need not have the best fist of those you heard, just of those you worked. Nominations should be sent to w2rs@amsat.org. A list of those nominated will be published in ANS in early February, and in a forthcoming issue of The AMSAT Journal.

[ANS thanks Ray, W2RS for the above information]

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SB SAT @ AMSAT $ANS-023.08
Satellite Shorts From All Over

AMSAT News Service Bulletin 023.08
>From AMSAT HQ SILVER SPRING, MD.
January 23, 2011
To All RADIO AMATEURS
BID: $ANS-023.08

+ Congratulations to Tom, KA6SIP for earning ARRL VUCC #208, and to Jim, K0BAM for earning ARRL VUCC #209.

+ The February Scientific American magazine has an article about Cubesats entitled "Citizen Satellites" on pages 48-53 by Alex Soojung-Kim Pang and Bob Twiggs. Many of you know Bob Twiggs as KE6QMD, a long-time AMSAT supporter who is widely known as having been "father" of the Cubesat concept when he was at Stanford University. Bob is now a Professor at Moorehead State Univ in Kentucky.

+ AMSAT Manger, Martha says you can own a piece of AMSAT history. She has the following software available for a minimum donation of $5.00:
<> Atari W3IWI (1985) 5 1/4 disk
<> AMSAT AMS-81 (1986) for Sinclair computers - Cassette
<> W3IWI Basic Orbits for I-99 (1985) - Cassette
<> UoSat 1 & 2 Telemetry Capture Editing and Decoding program for IBM - 5 1/4 disk
<> W3IWI Orbit Prediction Program for TRS-80 Color Computer - Cassette
<> AMSAT 2064 Tracking Program (1984) - Cassette
<> ORBITS II for IBM (1993) - 3 1/2 disk
<> N4HY QuikTrak for IBM - 3 1/2 disk

If you are interested send your order to:
AMSAT, 850 Sligo Ave, #600, Silver Spring MD 20910

+ AMSAT-UK has introduced a new online shop for satellite ground station hardware and software: http://tinyurl.com/AMSAT-UK-Shop

+ The AMSAT-UK FUNcube Amateur Radio satellite project is now on Facebook and Twitter. Go to http://www.facebook.com just lookup FUNcube. Twitter: http://www.twitter.com/FUNcubeUK You can join the FUNcube Yahoo Group at: http://groups.yahoo.com/group/FUNcube/
FUNcube website: http://www.FUNcube.org.uk/
FUNcube SDR Dongle: http://www.FUNcubeDongle.com/

+ Print Your 10th Anniversary International Space Station Calendar:
NASA's International Space Station calendar is now available in both

large and small file sizes to print at home, or with the help of a professional printer. To print it out on your home printer, download the 6.8 Mb file. To print it out in full resolution, take the link to the 74 Mb file to your preferred printer and specify the paper quality and printing instructions. The link to these files is on NASA's web at:
http://www.nasa.gov/mission_pages/station/main/index.html

+ For hams who experiment with space communications the latest VK3UM EME Calculator update (Ver 7.08) is now available. Download direct from http://www.vk3um.com

+ Space Adventures expects to resume tourist visits to the space station starting in 2013. The company does not discuss costs, but a seat on a Soyuz is believed to run between $30 million and $40 million. Full story at: http://spaceflightnow.com/news/n1101/12soyuz/

+ Science in the shack! Participate in real space research from your shack. The January 10, 2011 edition of the One Minute Astronomer describes an astronomy project which may be of interest to many scientifically oriented amateur radio operators. You are invited to become a Planet Hunter to aid in the search for exoplanets:
http://www.oneminuteastronomer.com/2011/01/10/planet-hunter/
Additionally, the http://www.zooniverse.org/ site has several other opportunities for amateur scientists to participate in research.

+ Tom, K8CX, has posted his collection of DX Sound Bites at:
http://hamgallery.com/dx2010

+ To celebrate the January 3, 2011 7th Anniversary on Mars for the Spirit and Opportunity rovers Glen Nagle created a downloadable poster. The poster includes scenes from both Spirit's and Opportunity's adventures. Download your copy from:
http://tinyurl.com/2aua69c (UniverseToday.com)

+ The latest information, photos, and videos of Vietnam's planned F-1 Cubesat are posted on-line at:
http://www.facebook.com/group.php?gid6436068290

+ John, VE3YUL reports that UO-11 was heard in darkness with a strong signal received on his handheld radio at 21:12 local on January 20,

2011 on the 145.825 MHz downlink.

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-023.09
Next Winners From PayPal Widget Announced

AMSAT News Service Bulletin 023.09
>From AMSAT HQ SILVER SPRING, MD.
January 23, 2011
To All RADIO AMATEURS
BID: $ANS-023.09

AMSAT-NA VP Operations, Drew KO4MA said this week, "We've randomly selected the next group of prize winners from those that have donated via the Paypal widget. For every $250 dollars raised we randomly pick a donor to receive a prize from the AMSAT prize closet:

$1750-$2000 Robert Benton W7VB
$2000-$2250 Kevin Schuchmann WA6FWF
$2250-$2500 Nigel Gunn W8IFF

Thank you to all that have donated to pay for the construction of ARISSat-1 and the beginning of the AMSAT-Fox project. ARISSat-1 is featured in this month's QST, and AMSAT-Fox is described by the VP Engineering in the current issue of the AMSAT Journal."

If you have an amateur radio website or blog, you too can help AMSAT raise the money required to pay for construction of these two satellites by adding the widget code to your site. You can even add it to your QRZ.com entry. Contact Drew at KO4MA@amsat.org for details. You can see the widget at http://www.amsat.org.

[ANS thanks Drew, KO4MA for the above information]

/EX

SB SAT @ AMSAT $ANS-023.10
HI0RCD Special Events Station Plans AO-51 Operation

AMSAT News Service Bulletin 023.10
>From AMSAT HQ SILVER SPRING, MD.
January 23, 2011
To All RADIO AMATEURS
BID: $ANS-023.10

The Radio Club Dominicano invites satellite operators to look for their special event station HI0RCD via AO-51 as they commemorate "The Month of the Patria" beginning on January 26, 2011 and ending on February 27, 2011 at 23:59 UTC.

January 26 marks the birthday of Juan Pablo Duarte, the Father of the Patria. February 27 marks the 167th anniversary of Dominican

independence.

A special QSL card will be available via the bureau. In addition to the planned AO-51 operation HI0RCD plans to also operate on 160, 80, 40, 20, 17, 15, and 10 meters using SSB, CW, and digital modes.

Luis, HI8LAM has also posted information of the special event station on his blog at: http://www.hi8lam.blogspot.com/

[ANS thanks Luis, HI8LAM for the above information]

/EX

AMSAT News Service Bulletin - 023.11
Donation to AMSAT via Required Minimum Distribution Option

AMSAT News Service Bulletin 023.11
>From AMSAT HQ SILVER SPRING, MD.
January 23, 2011
To All RADIO AMATEURS
AMSAT News Service Bulletin 023.11

[Editor Note: This bulletin header has been modified so that its content will not be automatically forwarded via packet bulletins. It contains a fundraising message which may not be allowed in some jurisdictions and discusses income tax provisions applicable to the United States. This message will appear in the e-mail release of the ANS-023 bulletins only.]

We're all getting older and many of us have reached the age of 70-1/2 when of us U.S. taxpayers must begin withdrawing funds from our IRAs. It's called Required Minimum Distribution (RMD). Of course, the amount withdrawn is counted as income and hence U.S. income Tax is due on that amount plus whatever other income the person has.

In the past several years, there has been a provision in the IRS Tax Code which allowed U.S. taxpayers to contribute a portion of the RMD to a charity and NOT have that portion be counted as taxable income.

That provision was due to expire for Tax Year 2010 but at the last minute, the new tax legislation passed by Congress and signed by the President included a provision reinstating it.

Normally, such charitable donations had to be made from the institution holding the IRA funds to the charity without passing through the hands of the RMD recipient. But, since the new tax legislation was not signed into law until December 17th, a special provision was included for the 2010 Tax Year only, allowing these contributions to be made directly by the person receiving them to the charity as long as they are made by January 31, 2011.

Thus, according to this provision, those of us who have already received RMDs for 2010 have until that end of this month to make much needed contributions to AMSAT and NOT have that amount counted as income

in calculating the federal income tax due for the 2010 Tax Year.

Note that AMSAT is NOT a tax consultant and is NOT empowered to furnish tax advice. The information presented here was obtained from news releases from several other reliable charities and is, to the best of our knowledge, reliable. Nevertheless, it is always best to consult your own tax advisor.

[ANS thanks the AMSAT Board of Directors for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office. And with that please keep in mind, the ham who decided to take up outdoor activities for the new year. He started by trying to play catch and wondered why the baseball was getting bigger ... then it hit him. Next he tried throwing a boomerang. He couldn't quite remember how it worked, but then it came back to him. Next up was hurdle jumping but he always had a fear of hurdles, but got over it. Finally, he tried rowing but being an indecisive person he couldn't choose either oar.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

19. Mixet.se Media Center - Mixet B2B Marketplace

Newsgroup: rec.radio.amateur.space
Date: 2011-01-26 14:20:30 UTC
From: Giuelith Diamond <giuelith@yahoo.com>
Message-ID: <e1b24f00-fed6-42b7-a291-2a43a1d1a48e@v17g2000yqv.googlegroups.com>
Source record: 445

Sökord för http://Mixet.se Annonser boka bannerplats/ring annonsbokningen, mixet marknadsföring, mobil tel: 070-5474830, Mixet B2B Marketplace Stockholm Mixet B2B Marketplace Göteborg, Mixet B2B Marketplace Malmö, Mixet B2B Marketplace Uppsala, Mixet B2B Marketplace Lund, Mixet B2B Marketplace Västerås, Mixet B2B Marketplace Örebro, Mixet B2B Marketplace Sundsvall, Mixet B2B Marketplace Norrköping, Mixet B2B Marketplace Helsingborg, Mixet B2B Marketplace Halmstad, Mixet B2B Marketplace Jönköping, Mixet B2B Marketplace Södertälje, Mixet B2B Marketplace Solna, Mixet B2B Marketplace Huddinge, Mixet B2B Marketplace Sundbyberg, Mixet B2B Marketplace Gävle, Mixet B2B Marketplace Hudiksvall, Mixet B2B Marketplace Sandviken, Mixet B2B Marketplace Härnösand, Mixet B2B Marketplace Östersund, Mixet B2B Marketplace Umeå, Mixet B2B Marketplace Örnsköldsvik, Mixet B2B Marketplace Skellefteå, Mixet B2B Marketplace Piteå, Mixet B2B Marketplace Luleå, Mixet B2B Marketplace Kiruna, Mixet B2B Marketplace Karlstad, Mixet B2B Marketplace Lidköping, Mixet B2B Marketplace Borås, Mixet B2B Marketplace Växjö, Mixet B2B Marketplace Kristianstad, Mixet B2B Marketplace Hässleholm, Mixet B2B Marketplace Karlskoga, Mixet B2B Marketplace Karlskrona, Mixet B2B Marketplace Kalmar, Mixet B2B Marketplace Trelleborg, Mixet B2B Marketplace Ängelholm, Mixet B2B Marketplace Laholm, Mixet B2B Marketplace Kungsbacka, Mixet B2B Marketplace Falkenberg, Mixet B2B Marketplace Varberg, Mixet B2B Marketplace Värnamo, Mixet B2B Marketplace Gislaved, Mixet B2B Marketplace Kungälv, Mixet B2B Marketplace Allingsås, Mixet B2B Marketplace Ljungby, Mixet B2B Marketplace Uddevalla, Mixet B2B Marketplace Skara, Mixet B2B Marketplace Vara, Mixet B2B Marketplace Falköping, Mixet B2B Marketplace Trollhättan, Mixet B2B Marketplace Nyköping, Mixet B2B Marketplace Katrineholm, Mixet B2B Marketplace Mariestad, Mixet B2B Marketplace Borlänge, Mixet B2B Marketplace Avesta, Mixet B2B Marketplace Leksand, Mixet B2B Marketplace Mora, Mixet B2B Marketplace Filipstad, Mixet B2B Marketplace Lindesberg, Mixet B2B Marketplace Östhammar, Mixet B2B Marketplace Österåker, Mixet B2B Marketplace Täby, Mixet B2B Marketplace Norrtälje, Mixet B2B Marketplace Åkersberga, Mixet B2B Marketplace Värmdö, Mixet B2B Marketplace Knivsta, Mixet B2B Marketplace Sigtuna, Mixet B2B Marketplace Vallentuna, Mixet B2B Marketplace Märsta, Mixet B2B Marketplace Spånga, Mixet B2B Marketplace Arlandastad, Mixet B2B Marketplace Bromma, Mixet B2B Marketplace Upplands-Bro, Mixet B2B Marketplace Upplands-Väsby, Mixet B2B Marketplace Lidingö, Mixet B2B Marketplace Vaxholm, Mixet B2B Marketplace Söderhamn, Mixet B2B Marketplace Timrå, Mixet B2B Marketplace Sollefteå, Mixet B2B Marketplace Kramfors, Mixet B2B Marketplace Idre, Mixet B2B Marketplace Sälen, Mixet B2B Marketplace Tärnaby, Mixet B2B Marketplace Malå, Mixet B2B Marketplace

Arjeplog, Mixet B2B Marketplace Arvidsjaur, Mixet B2B Marketplace Gällivare, Mixet B2B Marketplace Pajala, Mixet B2B Marketplace Haparanda, Mixet B2B Marketplace Tornio, Mixet B2B Marketplace Övertorneå, Mixet B2B Marketplace Överkalix, Mixet B2B Marketplace Kalix, Mixet B2B Marketplace Malung, Mixet B2B Marketplace Boliden, Mixet B2B Marketplace Järpen, Mixet B2B Marketplace Mark, Mixet B2B Marketplace Eksjö, Mixet B2B Marketplace Vetlanda, Mixet B2B Marketplace Ullricehamn, Mixet B2B Marketplace Mölndal, Mixet B2B Marketplace Lerum, Mixet B2B Marketplace Lindome, Mixet B2B Marketplace Stenugnsund, Mixet B2B Marketplace Strömstad, Mixet B2B Marketplace Gnosjö, Mixet B2B Marketplace Nässjö, Mixet B2B Marketplace Oskarshamn, Mixet B2B Marketplace Västervik, Mixet B2B Marketplace Gotland, Mixet B2B Marketplace Öland, Mixet B2B Marketplace Vimmerby, Mixet B2B Marketplace Markaryd, Mixet B2B Marketplace Hultsfred, Mixet B2B Marketplace Båstad, Mixet B2B Marketplace Ystad, Mixet B2B Marketplace Älmhult, Mixet B2B Marketplace Örkelljunga, Mixet B2B Marketplace Perstorp, Mixet B2B Marketplace Vellinge, Mixet B2B Marketplace Sjöbo, Mixet B2B Marketplace Skurup, Mixet B2B Marketplace Landskrona, Mixet B2B Marketplace Eslöv, Mixet B2B Marketplace Lomma, Mixet B2B Marketplace Simrishamn, Mixet B2B Marketplace Beta.

Annonsering: http://mixet.se
Blog Archive: http://ibank.mixet.se/

20. ANS-030 AMSAT News Service Weekly Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2011-01-30 03:22:25 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <001401cbc02c$e3129150$a937b3f0$@net>
Source record: 446
Cross-posted to: rec.radio.amateur.space,rec.radio.info

AMSAT NEWS SERVICE
ANS-030

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* ARISSat-1 Arrives at the International Space Station
* AMSAT-UK FUNcube System Accepted for UK Space Agency UKube1 Payload
* 1000 Days in Orbit for Ham Radio Satellite Delfi-C3
* ND9M/VQ9JC Maritime Mobile Satellite Operations Planned
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SB SAT @ AMSAT $ANS-030.01
ARISSat-1 Arrives at the International Space Station

AMSAT News Service Bulletin 030.01
From AMSAT HQ SILVER SPRING, MD.
January 30, 2011
To All RADIO AMATEURS
BID: $ANS-030.01

On January 28 at 0132 UTC,a Soyuz rocket lifted off from Kazakhstan carrying the Russian Progress M-09M cargo vehicle to orbit headed for the International Space Station (ISS).

While the primary cargo of the Progress vehicle is fuel, oxygen, food and other supplies, the Progress also contains AMSAT's ARISSat-1 Amateur Radio satellite.

Progress docked with the space station just two days after launch, on January 30 at 0239 UTC.

Currently ARISSat-1 is planned to be manually deployed from the ISS by Russian cosmonauts Dmitry Kondratyev and Oleg Skripochka during

a spacewalk on February 16. ARISSat-1/RadioSkaf V will have simultaneous 2m FM, CW, BPSK and transponder transmissions. These multiple transmissions are created by a new software defined transponder (SDX) board. Features provided by the SDX include:

* The FM transmissions with cycle between a voice ID, select telemetry values, 24 international greeting messages in 15 languages and live SSTV images.
* The CW transmissions will be callsign ID, select telemetry, and call signs of people actively involved with the ARISS program.
* The BPSK transmissions will feature a new 1kBPSK protocol developed by Phil Karn, KA9Q to be readable in low signal level conditions. The BPSK data will alternate betwen telemetry and Kursk experiment data. Free ground station soundcard demodulator and display software will be available before deployment for multiple platforms.
* There also is a 16kHz wide amateur radio U/V transponder between the BPSK and FM signals.
* The Kursk experiment will be sampling the amount of vacuum each day for 90 minutes and sending down data to map the vacuum change as the satellite slowly spirals into the atmosphere.

[ANS thanks Gould, WA4SXM, for the above information]

/EX

SB SAT @ AMSAT $ANS-030.02
AMSAT-UK FUNcube System Accepted for UK Space Agency UKube1 Payload

AMSAT News Service Bulletin 030.02
From AMSAT HQ SILVER SPRING, MD.
January 30, 2011
To All RADIO AMATEURS
BID: $ANS-030.02

Graham, G3VZV announced on behalf of AMSAT-UK this week that the FUNcube system has now been formally accepted as a participant in the UK Space Agency Announcement of Opportunity for payload providers for its pilot CubeSat mission, UKube1.

Seven finalist payloads are currently under consideration with the final three or four flight payloads to be announced in March, 2011. This includes the AMSAT-UK FunCube telemetry system for science education, which will be integrated with the spacecraft as part of the program.

Graham explained, "While the UK Space Agency release does not mention the FUNcube linear U/V transponder function during evenings and weekends, this functionality will be included in the same way that it is planned for the actual FUNcube-1 cubesat itself. The FUNcube development team is looking forward to the extra challenge of producing two sets of everything in the very short time scales required by both projects!"

[ANS thanks Graham, G3VZV for the above information]

/EX

SB SAT @ AMSAT $ANS-030.03
1000 Days in Orbit for Ham Radio Satellite Delfi-C3

AMSAT News Service Bulletin 030.03
From AMSAT HQ SILVER SPRING, MD.
January 30, 2011
To All RADIO AMATEURS
BID: $ANS-030.03

Sunday, January 23 saw the 1000th day in orbit for the Amateur Radio satellite Delfi-C3, which was the first 3U CubeSat to carry a linear transponder.

Wouter, PA3WEG wrote, "The downlink is still OK and telemetry shows no big degradations. This means Delfi-C3 is still in good health. Apart from the problems with the transponder and some occasional resets and lockups, scientific data is still being received. Also, this data is still forwarded by radio amateurs to our server. Once again our big thanks for receiving Delfi-C3 and your continued support of the project."

Visit the Delfi-C3 web page at: http://www.delfic3.nl/ The radio amateur section at: http://tinyurl.com/6f362zu has the information you need to receive the satellite. There is also a link to the Rascal Software if you would like to have your amateur radio station become a part of the global Delfi-C3 monitoring network.

[ANS thanks Wouter Weggelaar, PA3WEG and his Delfi-C3 team and the SouthGateARC site for the above information]

/EX

SB SAT @ AMSAT $ANS-030.04
ND9M/VQ9JC Maritime Mobile Satellite Operations Planned

AMSAT News Service Bulletin 030.04
From AMSAT HQ SILVER SPRING, MD.
January 30, 2011
To All RADIO AMATEURS
BID: $ANS-030.04

Jim, ND9M/VQ9JC plans to operate the amateur radio satellites from his merchant marine ship presently enroute from Diego Garcia (grid MI62) to Charleston, SC (FM03) via the Pacific Ocean. Jim says he has an FT897D and an FT817ND with an Arrow-2 antenna. He plans to be active from quite a few wet grids along the way. His ocean route will take him through grid fields include MI, NI, OI, OJ, PJ, PK, QK (24 hours at Guam), QL, RL, RM, AM, BM, CM. and DM.

Jim's job is seven days a week for four months straight and he will not generally be available during the normal daytime working hours

so operating opportunities during these times cannot be predicted.

The majority of passes he can be on will be in the late afternoon and early evening, so AO51, FO29, and AO7 Mode B will be the focus. Early morning AO7 passes will occasionally be available. Operating during late evening passes will be likely once the ship crosses the International Date line and enters the eastern Pacific. Jim's portable satellite station will be setup on the ship's helicopter deck.

The ship will be off the coast of southern California by the end of February and should be there for about 10 days before resuming the voyage towards Charleston via the Panama Canal, then northward around Cuba towards Jacksonville (EM90) for another stop at the end of March. The voyage will finish in April in Charleston, SC.

Jim says he has applied for an IARP permit for Panama so that, barring unforeseen regulations, he will be able to operate whatever passes occur as the ship transits the Canal.

E-mail contact for Jim is via james.t.clary.civ(at)msc.navy.mil. He plans to post regular updates on his trip's progress to the AMSAT-BB.

[ANS thanks Jim ND9M/VQ9JC for the above information]

/EX

SB SAT @ AMSAT $ANS-030.05
Catch a Visual Glimpse of NanoSail-D in Orbit

AMSAT News Service Bulletin 030.05
From AMSAT HQ SILVER SPRING, MD.
January 30, 2011
To All RADIO AMATEURS
BID: $ANS-030.05

In a posting on http://www.nanosail.org/ Spaceweather.com and NASA announce they are joining forces to encourage photography of NanoSail-D, the first solar sail to circle Earth in low orbit.

Amateur and professional astronomers and even casual sky watchers can participate. The solar sail will occasionally be visible to the naked eye when sunlight glints off the spacecraft's 10 m2 sail, producing a spectacular flash akin to an Iridium Flare. UniverseToday predicts NanoSail-D could be five to 10 times as bright as the planet Venus, especially later in the mission when the sail descends to lower orbits.

Even novice photographers can capture such a bright event. Advanced astrophotographers, meanwhile, will want to try to image the sail through backyard telescopes. It will be a challenge (the sail is only 1 arc second across), but even fuzzy pictures could help NASA monitor the condition of the spacecraft. Cash prizes will be awarded to the first ($500), second ($200), and third ($100) place photos, judged by a NASA-appointed panel on the basis of beauty and technical

merit.

The contest begins now and ends when NanoSail-D reenters the atmosphere in April or May 2011.

These sites provide viewing predictions:
http://spaceweather.com/flybys/
http://www.heavens-above.com

NASA's Science News web site has additional NanoSail-D news and a link to audio from the satellite recorded by Henk, PA3GUO:
http://tinyurl.com/4s7nj4r (nasa.gov)

[ANS thanks SpaceWeather.com and UniverseToday.com for the above information]

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SB SAT @ AMSAT $ANS-030.06
Echoes of Apollo Call for Student Investigators & Adult Engineering Mentors

AMSAT News Service Bulletin 030.06
From AMSAT HQ SILVER SPRING, MD.
January 30, 2011
To All RADIO AMATEURS
BID: $ANS-030.06

Pat Barthelow, AA6EG of the Echoes of Apollo Project (the folks who brought us the 70cm Arecibo EME activity) is working with kids on the Google Science Fair. The students and adult mentors have devised a simple experiment to measure the distance to the moon using Moon Bounce.

Pat has several EME stations committed and is looking for more technical support. He is also looking for additional young Co-Primary Investigators (Age 13-18) to participate.

Time is of the essence. Reply directly to: apolloeme@gmail.com

Pat says the students will develop the experiment, lead, analyze. Adults are needed to nurture, guide, mentor with these goals in mind:

+ Key a CW transmission or alternatively, send an audio impulse via microphone to EME TX.

+ Starting the time clock on the impulse transmission whether Audio "Clack" or CW key.

+ Recording for Science Fair presentation, using Multimedia video/audio eqiupment in the Moon bounce Station.

+ Stopping the clock when the audio/RF does RT to moon (~2.5 Seconds) and returns, and is demodulated by Moon bounce RX and presented at Audio speaker terminals.

+ Pre-measure station delays in TX and RX to develop a constant for internal equipment delays.

+ Measuring the EME interval as closely as possible, with simple equipment, say, to milliseconds. Probably take the Multimedia video/ audio to a Video editor, to measure delay, digitally.

+ Compare distance to the moon in the NASA, or US Naval Observatory databases for their actual distance to moon, at the moment of the experiment.

+ Student analyzes for errors, error sources, discusses return signal distortion, due to doppler, Libration, pulse stretching, due to spherical moon, etc.

+ Student suggests follow up experiment, to minimize measurement errors, or assuming more sophisticated equipment became available.

QUESTION: For an analog RX to audio output, what would be the best way be to measure the internal propagation delay in an [Analog, Digital] receiver, from the time of arrival of the RF at the Antenna connector to demodulated output [Analog, Digital] at the speaker, or computer screen.

For analog receivers, is the internal RX propagation delay, in order of: microseconds? Milliseconds? For Digital receivers?

Best Regards,
Pat Barthelow, Echoes of Apollo
apolloeme@gmail.com

[ANS thanks Pat Barthelow, AA6EG of the Echoes of Apollo Project for the above information]

/EX

SB SAT @ AMSAT $ANS-030.07
Satellite Shorts From All Over

AMSAT News Service Bulletin 030.07
From AMSAT HQ SILVER SPRING, MD.
January 30, 2011
To All RADIO AMATEURS
BID: $ANS-030.07

+ Clint, K6LCS has posted his AMSAT and amateur satellite handouts he plans to use at the Palm Springs HamFest. One is an "Intro to AMSAT" newsletter with membership form, the other an ARISSat-1 Update and Band Plan. Both are posted at: http://tinyurl.com/ps-handouts Clint invites you to use or adapt either for your projects and presentations.

+ Two videos of Japan's H-IIB rocket launch with the Kounotori 2 cargo resupply transporter January 22 from Tanegashima Space Center in southern Japan can be viewed at: http://tinyurl.com/64zuajp

Kounotori2, or 'White Stork' in Japanese, is loaded with crucial supplies destined for the International Space Station (ISS). Video and photos of the arrival and capture of the Kounotori2 can be seen at: http://tinyurl.com/4vop4rt

+ A new video gives the latest news on the Euroluna 2U CubeSat project with the Amateur Radio callsign OZ9LUNA. It describes the 2U cubesat, work on the software and the attitude control, and work ongoing on the ion motor. Watch on-line at: http://tinyurl.com/4cnfahv

+ An interesting science blog posting about the special relativity you would encounter while traveling at the speed of light is posted at: http://tinyurl.com/5sj7q2p (UniverseToday.com) This may present a way to change the subject to something scientific if the subject on 75 meters LSB QSO gets stuck on the state of the other fellow's gallbladder.

+ The folks from the HiRISE Camera on the Mars Reconnaissance Orbiter have put together a video of the latest images from the Red Planet: http://tinyurl.com/6hc7edb. The Mars Express spacecraft took a series of detailed images of the Martian moon Phobos. These images have been morphed into a seamless flyby movie which can be viewed on-line at: http://tinyurl.com/4srutec

+ The next Hudson Valley Satcom Net will meet on Thursday, February 3 at 8PM EST (UTC-5) on the Mt.Beacon ARC 146.970 MHz repeater (-600 & Pl 100). You can also join via Echolink on the N2EYH-L node. All hams are welcome! More info at http://www.hvsatcom.org/ (Stu, WA2BSS)

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-030.08
ARISS Status - 24 January 2011

AMSAT News Service Bulletin 030.08
From AMSAT HQ SILVER SPRING, MD.
January 30, 2011
To All RADIO AMATEURS
BID: $ANS-030.08

1. Two Italian Schools Experience ARISS Contact

On Tuesday, January 18, two Italian schools, "Istituto Comprensivo Ladispoli" and Middle School "Corrado Melone", located in Ladispoli, Rome, Italy participated in a joint Amateur Radio on the International Space Station (ARISS) contact with Paolo Nespoli, IZ0JPA. Twenty-eight space-related questions were answered and greetings exchanged over two ISS passes. ARISS mentor Francesco De Paolis, IK0WGF introduced the event and presented the ARISS program to an audience of 250 students, teachers and visitors. National Television (RAI NEWS 24 hours), local media and newspapers covered the event. The contact was the highlight

of a curriculum covering space, geography and telecommunications.

2. Expedition 24 Crew Debrief Session

An ARISS debrief session was held with Expedition 24 crewmembers Doug Wheelock, KF5BOC and Shannon Walker, KD5DXB on Tuesday, January 18. The feedback they provided on the ISS Ham radio equipment and school contacts will aid the ARISS team in updating its program procedures.

3. ARISS International Meeting Held

The monthly ARISS International Team meeting was held on Tuesday, January 18. Topics of discussion included the upcoming face to face meeting and a status on the Columbus module equipment as well as ARISSat-1. Minutes have been posted.
See: https://www.rac.ca/ariss/arisstel2011-01-18.htm

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

21. Crossposting Permitted to rec.radio.amateur.moderated

Newsgroup: rec.radio.amateur.space
Date: 2011-02-01 07:00:02 UTC
From: rram@panix.com
Message-ID: <radio/ham-radio/moderated/crossposting-1-1296543600@panix.com>
Source record: 447
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.info

```
Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/moderated/crossposting
Revision: 1.1 2009/04/12 19:42:04
Posting-Frequency: posted monthly
URL: http://www.panix.com/~rram/usenet/rram/index.html

Changes followed by "|".

After a 30-day public discussion and feedback period to gauge reader
opinions in March of 2009:

http://groups.google.com/group/rec.radio.amateur.moderated/browse_thread/thread/d7d337db35
f23326

the rec.radio.amateur.moderated Moderation Team has decided to consider
amending its charter, and permit limited simultaneous crossposting to
rec.radio.amateur.moderated and one other unmoderated
amateur-radio-related discussion newsgroup. We are currently trying
this on a temporary basis (90 days, through early July 2009), and adopt
it permanently if successful.

Approved rec.radio.amateur.* newsgroups are those that are currently
listed in the latest version of the "List of Big Eight Newsgroups" which
is crossposted monthly to news.announce.newgroups, news.groups, and
news.lists.misc.

Approved alt.radio.amateur.* and alt.ham-radio.* newsgroups are those
that have been created consistent with the suggestions in "So You Want
to Create an Alt Newsgroup" at:

http://www.faqs.org/faqs/alt-creation-guide/

Approved regional hierarchy newsgroups are those that contain either
"radio.amateur" or "ham-radio" in their names, including
uk.radio.amateur and aus.radio.amateur.misc.

We will make every reasonable effort to keep our list of approved
newsgroups up-to-date. In case we have overlooked any, and a submission
is rejected in error as a result, the rejected submitter can E-mail us
at our administrative contact address (in the signature at the bottom of
this article, and the default Reply-To for the rejection message)
requesting that it be added, and that the article be approved. We may
still choose to reject articles crossposted to any alt.* newsgroup with
an inappropriate name, including obscene language, embedded
name-calling, or encouragement of unlawful conduct.
```

Please direct any comments, questions, or criticisms to
rec-radio-amateur-moderated-request@panix.com.

22. Radio Meteor Obs. Bull. January 2011 Quadrantids

Newsgroup: rec.radio.amateur.space
Date: 2011-02-06 10:47:06 UTC
From: Chris Steyaert <observations@rmob.org>
Message-ID: <lsusk6lsiuimp05nentn6bkpkrrtgi6hdn@4ax.com>
Source record: 448
Cross-posted to: rec.radio.amateur.space,sci.astro.amateur

Radio Meteor Observation Bulletin No. 210 of January 2011 (108 K) is available now as

http://www.rmob.org/rmobtext/rmob1101.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

Chris

23. ANS-037 AMSAT News Service Weekly Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2011-02-06 15:40:03 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <000901cbc613$671811a0$354834e0$@net>
Source record: 449
Cross-posted to: rec.radio.amateur.space,rec.radio.info

AMSAT NEWS SERVICE
ANS-037

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* SKN Results
* ARRISSat-1 Update
* UO-11 Report
* AMSAT-DC Spring-Summer Workshop in planning
* 2 Notes from SA AMSAT
* ARRL Announces Teachers Institute TI-2 Space Curriculum
* Codec2 Alpha Release Demonstration
* ARISS Status - 31 January 2011
* AMSAT Will Be at the Orlando Hamcation February 11-13
* ARISSat-1 QSL Manager Volunteer Request

SB SAT @ AMSAT $ANS-037.01
SKN Results

AMSAT News Service Bulletin 037.01
From AMSAT HQ SILVER SPRING, MD.
February 6, 2011
To All RADIO AMATEURS
BID: $ANS-037.01

Many thanks to all who participated in AMSAT's Straight Key Night on OSCAR 2011, this year's event held in memory of Dick Peacock, W2GFF. Despite the frequent necessary power-management shut-downs of AO-51, activity was generally good, with AO-7, FO-29 and VO-52 picking up the load. A big "Well Done!" to all of the command stations.

The following participants each received one or more "Best Fist" nominations:

AA5PK, JH7UJI, JM1SBU, JR0EFE, K9CIS, N1AIA, N4ZQ,
N5AFV, N9AMW, ON5NY, PR7VX, PU4RON, VA7MG, W9EN,

WA5KBH, WB2SIH, WC7V, WD9EWK, 9A2EY

As can be seen from the list, from its very modest, informal beginnings on the North American east coast AMSAT net in the 1970s, SKN on OSCAR is now a worldwideevent. Long may it continue, and we hope to see you next year!

73,
Ray, W2RS

[ANS thanks Ray, W2RS, for the above information]

/EX

SB SAT @ AMSAT $ANS-037.02
ARISSat-1 Update

AMSAT News Service Bulletin 037.02
From AMSAT HQ SILVER SPRING, MD.
February 6, 2011
To All RADIO AMATEURS
BID: $ANS-037.02

The ARISSat team is anxiously awaiting the deployment of ARISSat-1 from the ISS during an EVA on 16 Feb 2011. NASA will cover the EVA on NASA Select TV. We don't have a final time during the EVA when the deployment task will occur. We are continuing to work on the arissat1.org site and adding information, people can also follow on Twitter @Arissat1.

[ANS thanks Gould, WA4SXM, for the above information]

/EX

SB SAT @ AMSAT $ANS-037.03
UO-11 Report

AMSAT News Service Bulletin 037.03
From AMSAT HQ SILVER SPRING, MD.
February 6, 2011
To All RADIO AMATEURS
BID: $ANS-037.03

OSCAR-11 REPORT 31 January 2011

This report covers the period from 31 December 2010 to 31 January 2011. During this time the satellite has been heard from 31 December 2010 to 10 January 2011, and from 21 January to 30 January . It is expected to switch-on again 10 February for ten days, and remain silent for the remainder of the month.

Excellent signals have been reported from stations located around the world, and good copy obtained from decoded telemetry frames.

The satellite is now transmitting during eclipses, although signals are weaker at those times. This indicates that there is still some capacity remaining in the battery.

The on-board clock is now very stable. It gained eight seconds during January.

The VHF beacon frequency is 145.826 MHz. AFSK FM ASCII Telemetry

Reception reports have been received from Christian SWL-CHMY, Mike DK3WN, Campo PY5JAP, Ron WB0SOK and Horatio CX8AF. Many thanks for those and to everyone who posted reports on the satellite status website.

At the present time, while OSCAR-11 is operating in a predictable way, I no longer need direct reports or files by e-mail. However, could all listeners continue to enter their reports on the general satellite status website. This is a very convenient and easy to use facility, which shows the current status of all the amateur satellites, and is of use to everyone. Reports around the expected times of switch-on and switch-off are of special interest, especially for times 12:00 - 17:00 and 22:00 - 07:00 UTC, to when the satellite is out-of-range in the UK. The URL is http://oscar.dcarr.org/index.php

A longer version of this report report is available on my website, and new listeners to OSCAR-11 should read this for further information. The URL is http://www.g3cwv.co.uk/oscar11.htm. This page contains a links to the longer report, a short audio clip to help you identify the satellite and a file of the last telemetry received. The website also contains an archive of news & telemetry data which is updated from time to time, and details about using a soundcard or hardware demodulators for data capture. There is also software for capturing data, and decoding ASCII telemetry.

If you place this bulletin on a terrestrial packet network, please use the bulletin identifier $BID:U2RPT153.CWV, to prevent duplication.

73 Clive G3CWV xxxxx@amsat.org (please replace the x's by g3cwv)

[ANS thanks Clive, G3CWV, for the above information]

/EX

SB SAT @ AMSAT $ANS-037.04
AMSAT-DC Spring-Summer Workshop in planning

AMSAT News Service Bulletin 037.04
From AMSAT HQ SILVER SPRING, MD.
February 6, 2011
To All RADIO AMATEURS
BID: $ANS-037.04

AMSAT Maryland-DC Area Coordinator Pat Kilroy, N8PK invites East Coast satellite operators to participate with him to plan, organize and conduct the 2011 AMSAT-DC Spring (or summer) Workshop. Pat says

the focus of the event will be To BUILD AND TEST something.

"Something" may include a PICetSat II flight module, a SoftRock SDR project, SDR Cube transceiver, a photovoltaic system battery charging regulator deep-cycle 90AH batteries, and the door is open for more suggestions.

Such a workshop for any of these projects will take nearly a whole day on which to make good progress. Pat is looking for a free or low cost meeting place. The free facility at Goddard Space Flight Center in Greenbelt, Maryland is availble subject security screening such as at the last Workshop.

Pat needs to know if there is enough interest? PLEASE RESPOND soon, by Tuesday, February 7, 5 PM, to amsat-dc@amsat.org list (preferred) or privately to Pat at n8pk@amsat.org. Pat hopes to hear from a great team of volunteers! Please pass the word!

[ANS thanks AMSAT Maryland-DC Area Coordinator Pat Kilroy, N8PK for the above information]

/EX

SB SAT @ AMSAT $ANS-037.05
2 Notes from SA AMSAT

AMSAT News Service Bulletin 037.05
From AMSAT HQ SILVER SPRING, MD.
February 6, 2011
To All RADIO AMATEURS
BID: $ANS-037.05

SA AMSAT Announces SAiSAT A Journey Into Tomorrow

This week SA AMSAT announced two new satellite initiatives. The first is a long-term research and development project called SAiSAT.

The Southern Africa Amateur Radio Satellite Association (SA AMSAT) which is affiliated to other AMSAT groups around the world is proposing an exciting satellite project and is inviting the participation of South African Universities and Universities of Technology in the development and construction of a completely South African Amateur Radio experimental satellite.

The objective of this satellite is to demonstrate South Africa's ability to engineer a satellite, employing the latest technology, and new innovations. In addition to some feasibility projects for future commercial use. The aim of the project is to contribute to propelling South Africa into a world position as a technology resource.

SAiSAT is based on the CubeSat satellite design. SAiSAT plans to use fold out panel a total of 24 in all that support solar panel steering in order to capture the maximum energy available from the

sun. The rear of the solar panels is free for project use. They have the potential to house 24 projects depending on size.

An additional research proposal is that the outer rim of each panel is fitted with pcb tracks in the form of a coil:
+ To generate additional power from the Earth's magnetic field.
+ To torque stabilise the satellite against the Earths magnetic field.
+ To give orientation data to resolve the attitude of the satellite.
+ Take additional unused power from the batteries and elevate the satellite into an every increasing orbit thus extending its use-fulness and orbital life.
+ Possible to create an 12 antenna arrary
* Provide a steerable antenna array with gain, thus reducing the necessary radio frequency power needed to maintain contact with earth.
* Provide a radio Doppler system on board so the satellite can confirm and report position, and supply the radial of interfering emissions.
* Provide a vital radio redundancy feature from antenna failure.
* Provide static charge data.
* Provide residual atmospheric density readings

SA AMSAT has issued an open invitation to tertiary institutions and individuals to participate in the project. A project meeting is scheduled on Friday 25 March ahead of the annual Space Symposium which will take place the next day. Full details are posted at: http://www.amsatsa.org.za/SAiSAT.htm

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SA AMSAT Announces Kletskous Amateur Radio Satellite Project

Project Manager Hannes Coetzee, ZS6BZP invites amateur satellite operators world-wide to monitor the SA AMSAT web page for project plans of the Kletskous satellite. (http://www.amsatsa.org.za)

Kletskous is a hands-on CubeSat aimed at promoting greater involve-ment in satellite activity by South African Radio Amateurs. The first draft of a project plan will be available soon on the SA AMSAT web. Regular updates will be posted as the project develops.

Hannes is inviting interested persons to join the team. "We are par-ticularly looking for radio amateurs with RF design experience, antenna design experience and software writing experience. Send your contact details and a short description of you technical background to saamsat@intekom.co.za.

[ANS thanks SA AMSAT and Hannes Coetzee, ZS6BZP for the above information]

/EX

SB SAT @ AMSAT $ANS-037.06
ARRL Announces Teachers Institute TI-2 Space Curriculum

AMSAT News Service Bulletin 037.06
From AMSAT HQ SILVER SPRING, MD.
February 6, 2011
To All RADIO AMATEURS
BID: $ANS-037.06

ARRL Announces Teachers Institute TI-2 Space Curriculum

The ARRL Education Services Department has announced the 2011 schedule for the Teachers Institute on Wireless Technology (TI) workshop.

Offered through the ARRL's Education & Technology Program, the Teachers Institute is a four-day, expenses paid, in-residence learning opportunity designed for motivated teachers and other school staff who want to learn more about wireless technology and bring that knowledge to their students.

A variety of topics are covered during the TI, including basic wireless technology literacy, electronics, the science of radio, radio astronomy, how to bring space into the classroom, ham radio operation, introduction to microcontrollers and basic robotics. While participants do not need to have an Amateur Radio license to attend the basic TI sessions, one is required for the advanced (TI-2) session.

TI-2 Space is sponsored by the Dayton Amateur Radio Association. The TI-2 Space curriculum focuses on the nuts and bolts of setting up and operating a satellite ground station. This serves as excellent preparation for a scheduled contact with the ISS through the Amateur Radio on the International Space Station (ARISS) program. But it also provides instruction for continued use of satellites and other man made space assets to explore naturally generated signals, space and a variety of topics. Dates of the Institute are July 11-14, 2011. The application deadline is May 15, 2011.

The course will be 4 days: the first half will be setting up and learning to operate the ground station, the second half will be practice making satellite contacts and instruction in using space borne assets in the classroom. Participants will receive all the equipment necessary to set up a basic satellite ground station. They will participate in an antenna building party (an activity they can duplicate back home with their students).

Though participants need not hold an amateur radio license to enroll in all other sessions of the TI, to be considered for a seat in TI-2 Space, participants must possess at least a Technician class license at the time of application. Priority for attending the TI-2 Space session will first be given to teachers who are signed up for an ARISS contact; second, to TI graduate teachers who have completed an ARISS contact; third to TI graduates who want to learn more about

bringing space related activities into their classrooms.

This session has a class limit of 8 participants, so apply early!
Full information and applications are on-line at:
http://www.arrl.org/ti-2-space-in-the-classroom

[ANS thanks the ARRL for the above information]

/EX

SB SAT @ AMSAT $ANS-037.07
Codec2 Alpha Release Demonstration

AMSAT News Service Bulletin 037.07
From AMSAT HQ SILVER SPRING, MD.
February 6, 2011
To All RADIO AMATEURS
BID: $ANS-037.07

If you attended the 2010 AMSAT Space Symposium you heard the talk by Bruce Perens, K6BP about the Codec2 Project, the open-source, low-bit rate voice codec that is being led by David Rowe VK5DGR.

Bruce, VE9QRP recently completed an internet bitstream concact with Paul, ZL3IN using an alpha-level release of Codec2. Bruce made a video of the conversation using the actual audio of the digital audio. You are invited to view/listen to the Codec2 demonstration at: http://www.youtube.com/watch?v=-nhHE6CrI

This demonstration is running at 2500 bps. Bruce wrote, "We're aiming for 2400 bps with Forward Error Correction, it could make satellite voice communication comprise a smaller bandwidth, offering less demanding downlink systems. Because it is open source, the codec could even be implemented in the satellite, perhaps to provide voice-encoded telemetry for a FUNcube-like project of the future."

The Codec2 site is http://www.rowetel.com/blog/?page_idE2

The source files of Bruce's conversation with ZL3IN, and many ancillary Codec2 materials are available on his blog:
http://ve9qrp.blogspot.com

[ANS thanks Bruce, VE9QRP for the above information]

/EX

SB SAT @ AMSAT $ANS-037.08
ARISS Status - 31 January 2011

AMSAT News Service Bulletin 037.08
From AMSAT HQ SILVER SPRING, MD.
February 6, 2011
To All RADIO AMATEURS

BID: $ANS-037.08

Amateur Radio on the International Space Station (ARISS) Status Report
January 31, 2011

1. Upcoming School Contacts

An Amateur Radio on the International Space Station (ARISS) contact scheduled for Arsaniq School in Kangiqsujuaq, Wakeham Bay, Quebec, Canada on Monday, January 31 at 19:26 UTC was successful via telebridge station LU8YY in Argentina will handle the radio connection. Students have learned about the ISS through videos, the internet and guest speakers.

Coll�ge Joseph Chassigneux, located in Vinay, France, was completed on Tuesday, February 1 at 07:02 UTC. Through this activity, teachers hope to expose students from mostly rural villages to the outside world. In French class, students have written articles for the school magazine about life on the ISS as well as items about their preparations for the radio contact. They have learned technical terms in English, built CW circuits in Physics and have studied continents and countries in Geography. Amateur radio operators plan to discuss the technical aspects of the contact with the youth.

An Amateur Radio on the International Space Station (ARISS) contact was completed with Buehl-Realschule Dornstadt in Dornstadt, Germany on Wednesday, February 2 at 07:32 UTC. Students have been introduced to wireless technology and have participated in related hands-on activities. In addition, workshops have been planned which will teach about the challenges faced in space travel.

An Amateur Radio on the International Space Station (ARISS) contact was scheduled and completed for Adobe Bluffs Elementary School, San Diego, California on Thursday, February 3 at 17:12 UTC. Through projects and hands on activities, students have been learning about electromagnetic waves, astronomy and other space-related topics.

2. Paolo Nespoli Speaks with Marco da Melo Students via ARISS

Istituto Comprensivo "Marco da Melo" in Mel, Belluno, Italy took part in an Amateur Radio on the International Space Station (ARISS) contact on Tuesday, January 25. Astronaut Paolo Nespoli, IZ�JPA answered the students' 21 questions over two ISS passes and exchanged greetings with the audience. Nearly 250 students, teachers and visitors were in attendance for the contact. Regional television RAI and local media and newspapers covered the event. Video streamed over the internet received over 50 connections. The ARISS contact was the featured event of a curriculum covering telecommunications, electrophysics and telegraphy.

3. Successful ARISS Contact with Polish School

On Wednesday, January 26, astronaut Cady Coleman, KC5ZTH participated in an Amateur Radio on the International Space Station (ARISS) contact with students, ages 15 - 18, from Liceum Ogolnoksztalcace Nr I im Stanislawa Staszica in Ostrowiec Swietokrzyski, Poland. Coleman answered

20 space-related questions

posed to her by the youth. Approximately 150 students, teachers and guests were on hand for this event which was covered by several media outlets. In addition to the required science curriculum, the school sponsors astronomy and amateur radio clubs as well as featured activities
such as this ARISS contact, in order to stimulate students' scientific interests.

4. Nelson County Area Technology Center Sponsors ARISS Contact

On Friday, January 28, on-orbit astronaut Cady Coleman, KC5ZTH took part in an Amateur Radio on the International Space Station (ARISS) contact with Foster Heights Elementary School students in Bardstown, Kentucky. Nelson County Area Technology Center students operated the amateur radio equipment during the pass during which Coleman answered 16 questions. An audience of approximately 100 people attended the event, including a representative from the Kentucky Department of Education. Television stations and newspapers covered the contact. To view the Kentucky Standard article, go to:
http://www.kystandard.com/content/foster-heights-students-use-amateur-radio-speak-astronaut

5. Civitavecchia, Italy Students Radio ISS

The primary school "Alessandro Cialdi" in Civitavecchia, Italy participated in an Amateur Radio on the International Space Station (ARISS) contact on Saturday, January 29. ESA astronaut Paolo Nespoli, IZ0JPA answered 17 questions posed by the students from "Autorit&#65533; Portuale" in Civitavecchia (Port authority of Rome) where an audience of nearly 200 students, teachers, visitors and media gathered for the contact. Before the ISS call, ARISS mentor Francesco De Paolis, IK0WGF introduced the event with a presentation on the ARISS program. Regional and local media and newspapers covered the event and the video, streamed on the internet by AMSAT-Italia, received 60 connections.

6. AMSAT - ARISSat-1 Delivered to the ISS

On January 27, ARISSat-1 was launched on Progress 41P and arrived at the ISS on Saturday, January 29. The satellite is expected to be deployed during a Russian EVA on February 16. The January 30 AMSAT (Radio Amateur Satellite Corporation) News Service bulletin (ANS-030) included an update on ARISSat-1. "ARISSat-1 Arrives at the International

Space Station" may be found at:
http://amsat.org/pipermail/ans/2011/000482.html

The AMSAT Web site has also been revised to include the latest information on ARISSat-1 with links to several news stories covering the satellite. See: http://www.amsat.org/amsat-new/index.php

7. ARRL Story on ARISSat-1 Launch

The American Radio Relay League (ARRL) ran an item on the launch of ARISSat-1 aboard Progress 41P. See: http://www.arrl.org/news/arissat-1-blasts-off

8. Amateur Radio Newsline Covers ARISS

On January 28, the Amateur Radio Newsline Report 1746 posted an item, "ARISSat-1 Set for Trip to the ISS" under its heading Ham Radio in Space. See: ftp://ftp.arnewsline.org/quincy/News/news.txt

[ANS thanks Carol, KB3LKI, for the above information]

/EX

SB SAT @ AMSAT $ANS-037.09
AMSAT Will Be at the Orlando Hamcation February 11-13

AMSAT News Service Bulletin 037.09
From AMSAT HQ SILVER SPRING, MD.
February 6, 2011
To All RADIO AMATEURS
BID: $ANS-037.09

AMSAT VP Operations Drew Glasbrenner, KO4MA reminds everyone that the Orlando Hamcation is just a week away, and AMSAT will be there in force. Here are the details of the hamfest ...

Orlando HamCation 2011
February 11, 12, 13
Central Florida Fairgrounds
Orlando, Florida 32808
Friday: Noon to 6pm
Saturday: 9am to 5pm
Sunday: 9am to 2pm

AMSAT has a forum scheduled Saturday from 1:45 to 3:15, and this year it is INSIDE! ARISSat-1 will be one of the main topic of discussion. The ARISSat-1 engineering model will be on display, and on the air. Drew will have a FUNcube Dongle Pro on display and in use. Tune your HT to 145.950 MHz to copy the FM downlink transmitting live from the hamfest.

AMSAT will also have live satellite demonstrations, ranging from simple handheld/portable operations, to fully automated systems.

Drew is also planning on having materials on hand for new members to build their own CJU 435 MHz antenna, for free as incentive to join and support AMSAT.

To make this all happen, we need your help. Orlando has become
AMSAT's busiest hamfest behind Dayton, and we need current members
to assist in the booth. If you can help answer questions and talk
up the amateur satellite program, please consider putting in a
few hours behind the table. Drop Drew an email at ko4ma@amsat.org,
and let him know when you can come by and help out!

[ANS thanks Drew Glasbrenner, KO4MA for the above information]

/EX

SB SAT @ AMSAT $ANS-037.10
ARISSat-1 QSL Manager Volunteer Request

AMSAT News Service Bulletin 037.10
From AMSAT HQ SILVER SPRING, MD.
February 6, 2011
To All RADIO AMATEURS
BID: $ANS-037.10

The ARISSat-1 team is looking for volunteers to manage the QSL opera-
tions for ARISSat-1. There will be recognitions for voice, CW, SSTV,
telemetry and Secret Word reception reports. We expect to have parti-
cipation from many students and classes worldwide. Please contact Gould
at wa4sxm at amsat dot org if you can help us with this part of the pro-
ject.

[ANS thanks Gould, WA4SXM, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the
President's
Club. Members of the President's Club, as sustaining donors to AMSAT
Project
Funds, will be eligible to receive additional benefits. Application
forms
are
available from the AMSAT Office.

73,
This week's ANS Editor,
Dee Interdonato, NB2F

24. WSR-041 AMSAT Weekly Satellite Bulletin

Newsgroup: rec.radio.amateur.space
Date: 2011-02-10 16:22:40 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <001701cbc93e$adc89470$0959bd50$@net>
Source record: 450
Cross-posted to: rec.radio.amateur.space,rec.radio.info

```
This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-041.S1
WSR 041 Part 1 02/10/2011

AMSAT NEWS SERVICE BULLETIN 041.S1
FROM AMSAT HQ SILVER SPRING, MD, February 10, 2011
TO ALL RADIO AMATEURS
BID: $WSR-041.S1

HO-68 HOPE-1 (CAS-1)(XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009 0231z
Launch site: Taiyuan Space Center, PRC

Status: By schedule

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
145.9250 - 145.9750 MHz SSB/CW
145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
435.7650 - 435.7150 MHz SSB/CW
435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[02092011]
=====
SO-67 SumbandilaSat
```

Catalog Number: 35870
Launch Date: September 17, 2009 1555z
Launch site: Baikonur, Kazakhstan

Status: By schedule

Callsign: ZS0SUM

Uplink: 145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/
[02092011]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[02092011]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05, 2005 0444z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.9360 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[02092011]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004 0745z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode(s):
Voice repeater: V/u
Uplink: 145.920 MHz FM
Downlink: 435.300 MHz FM

Telemetry: By Command ONLY
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.880 MHz FM
145.920 MHz FM
145.920 MHz FM - 67 Hz PL tone burst
1268.705 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.705 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[02092011]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002 1700z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4
Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the re-
peater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
the 10 minute timer.
[02092011]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993 0140z
Launch site: Kourou, French Guiana

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[02092011]
=====
AO-7 AMSAT OSCAR 7

Catalog number: 07530
Launch Date: November 15, 1974
Launch site: Vandenberg AFB, California, USA

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
145.972 MHz CW
435.100 MHz CW
2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02092011]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
Kourou, French Guiana
Uchinoura Space Center, Japan
Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - OFF
APRS - OFF
SSTV - OFF

Expedition 26 Crew:
Commander: Scott Kelly
Flight Engineer: Alexander Kaleri U8MIR
Flight Engineer: Oleg Skripochka RN3FU
Flight Engineer: Dmitry Kondratyev
Flight Engineer: Catherine Coleman KC5ZTH
Flight Engineer: Paolo Nespoli IZ0JPA

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[02092011]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-041.S2
WSR 041 Part 2 02/10/2011

AMSAT NEWS SERVICE BULLETIN 041.S2
FROM AMSAT HQ SILVER SPRING, MD, February 10, 2011
TO ALL RADIO AMATEURS
BID: $WSR-041.S2

O/OREOS
Catalog Number: 37224
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.035 MHZ AX.25

Beacon:

Callsign:

URL: http://www.ooreos.org/
[02092011]
=====
Rax-1 Radio Aurora Explorer
Catalog Number: 37223
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.505 MHz 9k6 GMSK

Beacon:

Callsign: RAX-1

URL: http://rax.engin.umich.edu/
[02092011]
=====
Fastrac-1 Sara Lily
Catalog Number: 37225
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On orbit

Uplink 1: 145.980 MHz 1k2 baud
Uplink 2: 145.825 MHz 1k2 baud
Downlink: 437.345 MHz 1k2 and 8k6 baud

Beacon: 437.435 MHz 1k2 AX.25

Callsign: Fast1

URL: http://fastrac.ae.utexas.edu/index.php
[02092011]
=====
Fastrac-2 Emma
Catalog Number: 37227
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink 1: 435.025 MHz 1k2 baud
Uplink 2: 437.435 MHz 9k6 baud
Downlink: 145.825 MHz

Beacon: 145.825 MHz 1k2 AX.25

Callsign: Fast2

URL: http://fastrac.ae.utexas.edu/index.php
[02092011]
=====
StudSat
Catalog Number: 36796
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink: 437.505MHz, 9600bps FSK
Downlink: 437.505MHz, 9600bps FSK
Beacon : 437.505MHz, 20bps ASK
[02092011]
=====
TIsat-1
Catalog Number: 36799
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On orbit

Callsign: HB9DE

Uplink: 145.980MHz FM, AFSK
Downlink: 437.305MHz FM, AFSK
Beacon: 437.305MHz CW
[02092011]
=====
HO-68 HOPE-1 (CAS-1)(XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009 0231z
Launch site: Taiyuan Space Center, PRC

Status: By schedule

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
145.9250 - 145.9750 MHz SSB/CW
145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
435.7650 - 435.7150 MHz SSB/CW
435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[02092011]
=====
SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w): 437.5050MHz FSK 1k2bps
[02092011]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
437.3850 MHz FSK 9k6bps
[02092011]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps
[02092011]
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
Beacon(500mw): 436.000MHz GMSK 9k6bps
[02092011]
=====
CP-6

Catalog Number: 35003
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: Operational

Downlink: 437.365 MHz 1k2 AFSK
[02092011]
=====
HAWKSAT 1
Catalog number: 35004
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: operational

Downlink: 437.345 MHz ?
[02092011]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: Operational

Downlink: 437.465 MHz 1k2 AFSK
[02092011]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009 0115z
Launch Site: Satish Dhawan Space Centre, India

Status: ?

Downlink: 435.000 MHz
Uplink: 145.800 MHz

Telemetry: 137.400 MHz
[02092011]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon: 437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[02092011]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: In Orbit

Downlink: 437.375 MHZ FSK9k6/CW
Beacon: 437.375 MHz FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[02092011]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
437.465 MHz FM/CW
Beacons: 437.305 MHz FM/CW
437.275 MHz FM/CW

Callsigns: JR5YBN
JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[02092011]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Downlink: 437.455 MHz AFSK/CW
Beacon: 437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[20092011]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon: 437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[02092011]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008 1520z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Curent Modes: Telemetry
Audio
Images

Downlinks: 435.315 MHz
435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02092011]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web
page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[02092011]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[02092011]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Digipeater

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL
=/satellites/status.php
[02092011]
=====
Compass-1

Catalog number: 32787
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Current Mode: 4k8 MSK packet

Uplink: 145.980 MHz FM
Downlink: 437.275 Mhz CW
437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[02092011]
=====
CO-66 Seeds II
Catalog number:
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web
page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL
=/satellites/status.php
[02092011]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[02092011]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[02092011]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005 0652z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[02092011]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: ?????

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[02092011]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004 0745z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode(s):
Voice repeater: V/u
Uplink: 145.920 MHz FM
Downlink: 435.300 MHz FM

Telemetry:
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.880 MHz FM
145.920 MHz FM
145.920 MHz FM - 67 Hz PL tone burst
1268.700 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.708 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[02092011]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[02092011]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Current Mode: CW downlink worldwide
AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php
[02092011]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001 0240z
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[02092011]
=====
RS-22 RADIO SPORT 22 (MOZHAYETS 4)
Catalog number: 27939
Launch Date: September 27, 2003 0612z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02092011]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990
Launch site: Kourou, French Guiana

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
145.860 MHz 1200-baud Manchester FSK
145.880 MHz 1200-baud Manchester FSK
145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[02092011]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984
Launch site: Vandenburg AFB, California, USA

Status: Operational

Current Mode: /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz

Mode-S Beacon: 2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[02092011]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
Kourou, French Guiana
Uchinoura Space Center, Japan
Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - OFF
APRS - OFF
SSTV - OFF

Expedition 26 Crew:
Commander: Scott Kelly
Flight Engineer: Alexander Kaleri U8MIR
Flight Engineer: Oleg Skripochka RN3FU
Flight Engineer: Dmitry Kondratyev
Flight Engineer: Catherine Coleman KC5ZTH
Flight Engineer: Paolo Nespoli IZ0JPA

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[02092011]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-041.S3
WSR 041 Part 3 02/10/2011

AMSAT NEWS SERVICE BULLETIN 041.S3
FROM AMSAT HQ SILVER SPRING, MD, February 10, 2011
TO ALL RADIO AMATEURS
BID: $WSR-041.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NANOSAIL-D
Catalog Number:
Ejection Date: January 17, 2011

Status: On orbit

Downlink: 437.270 MHz AX.25

URL: http://nanosaild.engr.scu.edu/dashboard.htm
[01272011]
=====
CP4
Catalog Number: 31132
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[09062010]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[09062010]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[09062010]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.250

Official Website: http://www.ncube.no
[09062010]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink 2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[09062010]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[09062010]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====

MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks: 145.850 MHz
145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545

Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks

V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON General Beacon(GB) Middle Beacon(MB) Engineering Beacon(EB)
2 m none 145.898 MHz none
70cm 435.438 MHz 435.588 MHz 435.838 MHz
13cm(1) 2400.188 MHz 2400.338 MHz 2400.588 MHz
13cm(2) 2401.173 MHz 2401.323 MHz 2401.573 MHz
3cm 10450.975 MHz 10451.125 MHz 10451.375 MHz
1.5cm 24047.885 MHz 24048.035 MHz 24048.285 MHz
[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK

[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
145.890 FM
145.930 FM
1269.700 FM
1269.800 FM
1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[07172010]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink: 435.1380 MHz AFSK 1200 BPS
Downlink: 435.2060 MHz AFSK 1200 BPS
Uplink: 145.8150 MHz AFSK 1200 BPS
Uplink: 145.8350 MHz AFSK 1200 BPS
Uplink: 145.8550 MHz AFSK 1200 BPS
Uplink: 145.8750 MHz AFSK 1200 BPS
[06042009]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Non-operational
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
145.870 MHz FM
145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[11062010]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks: 145.875 MHz FM 1200-baud
145.900 MHz FM 1200-baud
145.925 MHz FM 1200-baud
145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink: 435.0625 MHz FM 1k2bps AFSK
435.1125 MHz FM 1k2bps AFSK
435.1375 MHz FM 1k2bps AFSK

Downlink: 145.9750 MHz FM 1k2bps AFSK
2446.5025 MHz FM 1k2bps AFSK

Beacon: 2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink: 435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons: 435.795 MHz CW
435.910 MHz AX25

Voice Transponder:
Uplink: 145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks: 145.850 MHz
145.870 MHz
145.890 MHz
145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode: V/u

Uplink: 145.900 MHz FM 1200-baud Manchester FSK (reserved)
145.920 MHz FM VOICE
145.940 MHz FM 1200-baud Manchester FSK (reserved)
145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink: 437.026 MHz USB VOICE
(1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
PSK 437.026 MHz LHCP

V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink: 145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink: 145.8500 MHz MFSK 1200 BPS
Uplink: 145.8700 MHz MFSK 1200 BPS
Uplink: 145.8900 MHz MFSK 1200 BPS
Uplink: 145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.8500 - 145.9000 MHz SSB/CW
Downlink 29.4000 - 29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink: 29.4500 - 29.5500 MHz SSB/CW
Beacons: 29.450 MHz
435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
29.4500 MHz CW
[01152007]
=====
OSCAR III

Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink: 145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB

Beacon 1: 29.352 MHz (intermittent)
Beacon 2: 29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
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SB SAT @ AMSAT W8ISS $WSR-041.S4
WSR 041 Part 4 02/10/2011

AMSAT NEWS SERVICE BULLETIN 041.S4
FROM AMSAT HQ SILVER SPRING, MD, February 10, 2011
TO ALL RADIO AMATEURS
BID: $WSR-041.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Re-entered
Re-entered: October 25, 2009

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[09062010]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 437.325 MHz 9k6 GMSK
437.325 MHz CW 20wpm
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 436.250 MHz 9k6 FHSS
[11112009]
=====
Pollux
Catalog Number: 35693
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25
[09062010]
=====
Castor (ANDE-2)
Catalog Number: 35694
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25
[09062010]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Re-Entered
Re-entered date: August 8, 2010

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[08082010]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
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ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA

850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at}
amsat.org
NNNN
/EX

25. ANS-044 AMSAT News Service Weekly Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2011-02-13 02:59:49 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <001401cbcb2a$0f706440$2e512cc0$@net>
Source record: 451
Cross-posted to: rec.radio.amateur.space,rec.radio.info

AMSAT NEWS SERVICE
ANS-044

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* ARISSat-1 Update - No Wednesday Deployment of ARISSat-1
* ARRISat-1 Team Pointers to Get Ready for SSTV Reception
* View Student Projects Flying on ARISSat-1
* AMSAT Awards Announcement
* AA5UK Announces Plans for ZF2AE Grand Cayman Satellite Operation
* Satellite Shorts From All Over
* Opportunity for Students to Participate on "Extra" Shuttle Mission
* Launch Opportunity To All Balloon Groups, Or Individuals

SB SAT @ AMSAT $ANS-044.01
ARISSat-1 Update - No Wednesday Deployment of ARISSat-1

AMSAT News Service Bulletin 044.01
>From AMSAT HQ SILVER SPRING, MD.
February 13, 2011
To All RADIO AMATEURS
BID: $ANS-044.01

1. On Wednesday, 9 FEB 11 NASA announced that ISS Russian Segment (RS) EVA28 will be broadcast live on NASA TV, starting at 1245 UTC on Wednesday, 16 FEB 11. Included in the schedule for RS EVA28 posted by NASA was the deployment of ARISSat-1/RadioSkaf-V/Kedr RS EVA 28 is being managed by RSC-Energia, the operating entity of the ISS RS, as well as the Soyuz and Progress vehicles.

2. On Thursday, 10 FEB 11 RSC-Energia finalized plans to perform a preliminary test of ARISSat-1 while inside the ISS to verify that the satellite could transmit following its delivery to the ISS on a Progress resupply vehicle.

This was not an event that was previously scheduled. Instructions were sent to the Cosmonauts to give them a test procedure with

activation scheduled for that day at 1605 UTC. For this test, the ARISSat-1 VHF antenna port was connected to an RF patch panel inside of the Zvezda Service Module, to provide an RF connection of the satellite to one of the four ARISS external antennas mounted on the aft end of the Service Module. ARISSat-1 was then activated and the Cosmonauts listened for the satellite's FM transmissions using the Kenwood TM-D700(E). This radio is normally used for ARISS school contacts which is connected to an adjacent ARISS external antenna.

During the test, RSC-Energia decided to keep the transmitter on until Friday morning. AMSAT was notified Friday morning that the cosmonauts reported that tests were nominal. A number of ground stations reported hearing the transmissions as well, including AMSAT VP-Engineering Tony Monteiro, AA2TX in North Andover, MA.

This preliminary test was not announced to amateurs in advance due to the short time frame between RSC-Energia's decision to conduct this test and when it was conducted as well as the uncertainty as to how long the satellite's transmitter would remain activated.

3. AMSAT learned on Friday morning, 11 FEB 11 that the deployment of the ARISSat-1 satellite had been removed from the RSA EVA 28 timeline by RSC-Energia management. NASA was informed that the ARISSat-1 deployment would be deferred to a later RS EVA, due to changes in the tasks associated with the configuration of RS pay-loads to be performed during RS EVA 28. Subsequently, RSC-Energia informed NASA that deployment of ARISSat-1 will be added to RSC EVA 29 currently scheduled for July 2011.

[ANS thanks the ARISSat-1 Team for the above information]

/EX

SB SAT @ AMSAT $ANS-044.02
ARRISat-1 Team Pointers to Get Ready for SSTV Reception

AMSAT News Service Bulletin 044.02
>From AMSAT HQ SILVER SPRING, MD.
February 13, 2011
To All RADIO AMATEURS
BID: $ANS-044.02

The ARISSat-1 FM downlink on 145.950 MHz includes live SSTV images as part of the cycling voice ID, select spoken telemetry values, and the international greeting messages. The recently announced schedule delay for ARISSat-1 deployment gives every one time to begin station improvements to receive SSTV pictures from orbit.

One fun feature is that there are four SSTV cameras mounted on the spacecraft. On photos of ARISSat-1 you may have noticed black

brackets on the outside of the spacecraft. These hold the mirrors that reflect the light onto the lens of the cameras. The software-defined-transponder will use the image data from the cameras to generate the SSTV downlink.

ARISSat's software will sequentially select a new or stored image from one the four cameras. There are two pre-recorded images as part of the sequence. The camera that took the the picture can be identified by the color of the call sign in the upper left of the SSTV image. The SSTV image will be sent down as FM audio SSTV in Robot 36 format on 145.950 MHz about every 140 seconds.

The RF downlink power on the 145.950 MHz FM downlink will be 250mW which is predicted to provide a link margin around 6 dB on an HT with a 'big whip' when the satellite is at 15 degrees elevation. This should be sufficient to receive SSTV pictures although you may need to orient the whip to line up the antenna polarization.

ARISSat-1 is not stabilized so the antenna orientation is unpredict-able and a certain amount of fading will happen. The receiving link margin may be improved with a handheld beam such as an "Arrow", "Elk", or "Cheap Yagi" antenna.
(See: http://www.wa5vjb.com/references/Cheap%20Antennas-LEOs.pdf)

General Overview Radio-to-Soundcard Interface

To view the SSTV downlink from ARISSat-1 you'll need a computer running SSTV software for your soundcard and an audio connection between your radio and the computer.

If you are already on the air with other amateur radio soundcard applications chances are you are ready to receive ARISSat's SSTV downlink with little or no modification to your setup.

The audio from the radio to the computer is the key link. An initial "Receive Only" configuration is easily done consisting of an audio patch cable between your radio and the soundcard. Take the speaker or headphone output from the radio and run it into the line (or mic) input on your PC sound card.

Setting the level is simple also as the MMSSTV software has a bar indicator. Just adjust the sound card gain slider and/or radio volume control so that the SSTV signal is within the center part of the bar. MMSSTV will give you an "overflow" indication if the volume is too high.

If your rig has a 'Line Out' connection this can be run to the soundcard 'Line In'. Using the radio 'Line Out' you won't have to deal with the interaction of the radio's volume control with the soundcard levels. But you will still need to use the soundcard 'Volume Control' to set the 'Line In' levels.

SSTV Software Download Sites

There are many amateur radio SSTV software decoding applications
available. One of the easiest to use on Windows computers is the
MMSSTV program. This can be downloaded from:
http://mmhamsoft.amateur-radio.ca/pages/mmsstv.php

MMSSTV installs like most other Windows software. The download
site has audio test files for you to learn with. If you have an
HF rig the SSTV crowd hangs out 14.230 MHz and you can use their
signals for testing and learning.

MMSSTV will also automatically determine which SSTV protocol is in
use. You won't need to remember Robot 36 if you set MMSSTV's RX mode
to 'Auto'.

SSTV software for the Mac is available at:
http://web.me.com/kd6cji/MacSSTV/MultiScan.html

[ANS thanks the ARISSat-1 Team for the above information]

/EX

SB SAT @ AMSAT $ANS-044.03
View Student Projects Flying on ARISSat-1

AMSAT News Service Bulletin 044.03
>From AMSAT HQ SILVER SPRING, MD.
February 13, 2011
To All RADIO AMATEURS
BID: $ANS-044.03

ARISSat-1 will carry many education-based features encouraging stu-
dent interaction. During the development of the satellite, students
from around the world were invited to submit images and letters doc-
umenting their participation in science activities and projects.

These submissions have been processed and stored on a memory chip
that has been attached to ARISSat-1 and is flying along with the
craft as it orbits the Earth. The student projects and photos can
all be viewed ARISS Europe web site at:
http://www.ariss-eu.org/arissat-1.htm

[ANS thanks ARISS-Europe for the above information]

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SB SAT @ AMSAT $ANS-044.04
AMSAT Awards Announcement

AMSAT News Service Bulletin 044.04
>From AMSAT HQ SILVER SPRING, MD.
February 13, 2011
To All RADIO AMATEURS
BID: $ANS-044.04

AMSAT Director Contests and Awards Bruce Paige, KK5DO says that
congratulations are in order for the first awards issued for 2011.

The following have entered into the Satellite Communicators Club for
making their first satellite QSO.
Anthony Allen, W6CSA
Wyatt Dirks, AC0RA
Brian Erwin, KJ4TDM
Palo Lanca, 9A3DPL
Zeljko Eklic, 9A1WW
Vaclav Ujcik WD9HBC

The following have earned the AMSAT Communications Achievement Award.
Wyatt Dirks, AC0RA #531
Patrick Farcon, N2VYT #532

The following have earned the South Africa Satellite Communications
Achievement award
Wyatt Dirks, AC0RA #US163
Patrick Farcon, N2VYT #US164

To see all the awards visit http://www.amsat.org.

[ANS thanks Bruce Paige, KK5DO for the above information]

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SB SAT @ AMSAT $ANS-044.05
AA5UK Announces Plans for ZF2AE Grand Cayman Satellite Operation

AMSAT News Service Bulletin 044.05
>From AMSAT HQ SILVER SPRING, MD.
February 13, 2011
To All RADIO AMATEURS
BID: $ANS-044.05

Adrian, AA5UK will be operating portable as ZF2AE from Grand Cayman
and as ZF2AE/ZF8 from Little Cayman from March 23th to April 5th, 2011.

Most activity will be in the afternoons and evenings using two FT-817s
and an Elk Antenna. He plans to operate holiday style on the FM and
SSB satellites with some HF.

Activity will be from grids: EK99hi from March 23 - 24th, EK99xp from
March 25th - April 2nd (he plans to operate HF during part of CQ WPX
SSB contest while on Little Cayman: 40m to 10 m) and EK99kh from
April 2nd - April 5th.

Time permitting; he will try to make it to grid FK09. Frequently check
AMSAT-BB and http://twitter.com/AA5UK for last minute operational updates.
QSL Direct with SASE, the Bureau, LOTW or eQSL.

[ANS thanks Adrian, AA5UK for the above information]

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SB SAT @ AMSAT $ANS-044.06
Satellite Shorts From All Over

AMSAT News Service Bulletin 044.06
>From AMSAT HQ SILVER SPRING, MD.
February 13, 2011
To All RADIO AMATEURS
BID: $ANS-044.06

+ Get ARISSat-1 updates via SMS by texting 'follow Arissat1'
(no quotes) to 40404 in the United States. Codes for other
countries can be found at http://twitter.com/arissat1

+ Roland, PY4ZBZ received the ARISSat-1 145.950 MHz test transmission
from the ISS on February 10 when the crew tested the satellite using
one of the external antennas on the space station. Audio file can be
found at: http://www.qsl.net/py4zbz/satelite/ARISSAT1PY4ZBZ1.wav

+ A web based satellite tracker can be found at:
http://carlfretwell.com/satellites/

+ A YouTube video shows that a simple handheld radio is all you need
to hear Radio Amateur Astronauts from the ISS. In the video Astro-
naut Catherine Coleman, KC5ZTH is using the ISS Amateur Radio sta-
tion to talk to young people at a school radio station near Ulm,
Germany. Watch ISS hamradio contact received with a Kenwood hand-
held TH-F7: http://tinyurl.com/5rgslof (SouthGate)

+ ICOM factory tour slides are posted at:
http://www.nsarc.ca/hf/icom2010.pdf

+ Good DX via AO-51: Pierre ZS8M on Marion island made contact with
John ZD9GI on Gough Island, both remotely located islands in the
South Atlantic. Pierre also logged ZS1LS, ZS2BK, ZS3SVD, ZR5JT,
5R8KH, ZS1UR , ZS6AC, ZD9GI and V51PJ.

+ Good DX via AO-7: Gary, K4MF and Luis, LU6QI made a CW contact
on AO-7 Mode B on January 30, 2011. Both stations reported a
clear copy with the satellite just above the horizon. The
distance is 7024.45 KM.

+ The next Hudson Valley Sat Com Group net is February 17 at 2000 EST
(UTC-5) on the 146.97 MHz. Repeater (-600; Pl 100); w/ an Echolink
Node of "N2EYH-L" More info: http://www.hvsatcom.org. (Stu, WA2BSS)

+ SA AMSAT reminds satellite operators that SO67 operates on the
following schedule:
Week 1 America
Week 2 Europe
Week 3 Asia
Week 4 Eastern Asia/Australasia

The schedules are published on http://www.amsatsa.org.za

+ Jim, G3WGM uploaded a very brief description plus a few pics of
the FUNcube model: http://funcube.org.uk/overview/model/

+ Two satellite videos of the February blizzard that swept across
the continental United States can be viewed at:
http://tinyurl.com/6zbad68 (UniverseToday.com)

+ Brad Goodspeed created an animation which shows different planets
in our solar system as they would appear in the sky if it shared
an orbit with our Moon, 380,000 km from earth:
http://bradblogspeed.com/what-would-neptune-look-like-if-it-orbited-ea

+ Edge of Space Sciences Balloon Flight, Saturday, 19 Feb 11 from
Colorado (USA) with amateur radio aboard. Details at:
http://www.eoss.org/flight/index.html

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-044.07
Opportunity for Students to Participate on "Extra" Shuttle Mission

AMSAT News Service Bulletin 044.07
>From AMSAT HQ SILVER SPRING, MD.
February 13, 2011
To All RADIO AMATEURS
BID: $ANS-044.07

UniverseToday published a news item (http://tinyurl.com/6dnjp4e)
with a new opportunity for students to be part of history and fly
an experiment on what could be the last space shuttle mission. The
program is the Student Spaceflight Experiments Program (SSEP) for
the STS-135, the shuttle mission that might fly in June of 2011.

SSEP is a new program that launched in June 2010 by the National
Center for Earth and Space Science Education in partnership with
NanoRacks, LLC, a company that is working with NASA under a Space
Act Agreement as part of the utilization of the International
Space Station as a National Laboratory.

The company hopes to stimulate space station research by providing
a very low-cost 1 kilogram platform that puts micro-gravity projects
within the reach of universities and small companies, as well as
elementary and secondary schools through SSEP. So, this is actually a
commercial space program and not a NASA program.

This opportunity offers real research done on orbit, with students
designing and proposing the experiments to fly in low Earth orbit.

According to the National Center for Earth and Space Science Educa-
tion, "We hope to get 50 communities and 100,000 students participa-
ting in the initiative which allows grade 5-14 student design of real
experiments to fly aboard Atlantis, and engages entire communities,"

But it is now time critical for schools to be able to participate. There is a proposal submission deadline of May 12, 2011. By the end of May, the flight experiments will be selected, so that NASA can be provided with the materials list 3 months in advance of launch.

For more information see the SSEP website http://ssep.ncesse.org/

[ANS thanks UniverseToday for the above information]

/EX

SB SAT @ AMSAT $ANS-044.08
Launch Opportunity To All Balloon Groups, Or Individuals

AMSAT News Service Bulletin 044.08
>From AMSAT HQ SILVER SPRING, MD.
February 13, 2011
To All RADIO AMATEURS
BID: $ANS-044.08

Joe, WB9SBD of Near Space Sciences, a group that specializes in high altitude balloon flights is offering a launch opportunity that will be a once in a lifetime opportunity!

Near Space Sciences is looking for proposals to fly a payload on a maximum altitude record attempt to +250,000 feet. Other mission plans include to allow the high altitude balloon to be a free-floating flight since it will not burst at its max-mum altitude.

For more details visit: http://www.qsl.net/wb9sbd/300K.html
Joe will post any proposals he receives for everyone to examine.

[ANS thanks Joe, WB9SBD for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office. And, with that, keep in mind the ham who thought he found the perfect hands-on job where he set his own hours as a watchmaker. When that didn't work out he tried to become a grocer but it only offered a meager celery and he came home every evening beet.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

26. ANS-051 AMSAT News Service Weekly Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2011-02-20 15:35:26 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <000e01cbd113$c76b1a60$56414f20$@net>
Source record: 452
Cross-posted to: rec.radio.amateur.space,rec.radio.info

AMSAT NEWS SERVICE
ANS-051

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* February 23 CubeSat Launch From Vandenberg AFB
* ARISSat-1 Update
* AMSAT India February 2011 Newsletter Published
* Satellite Operation From Canary Islands Special Event Station
* First Call for Speakers for AMSAT UK Colloquium 2011
* University Nanosat-6 Winner Announced
* Satellite Shorts From All Over
* Four Successful ARISS Contacts Held this Week

SB SAT @ AMSAT $ANS-051.01
February 23 CubeSat Launch From Vandenberg AFB

AMSAT News Service Bulletin 051.01
From AMSAT HQ SILVER SPRING, MD.
February 20, 2011
To All RADIO AMATEURS
BID: $ANS-051.01

NASA will launch the Glory satellite, an Earth-observation satellite from Vandenberg Air Force base, California on February 23 at 0809 UTC. Secondary payloads include student cubesats from the University of Kentucky, University of Montana, and University of Colorado.

KySat-1, University of Kentucky

436.790 MHz Beacon and FM downlink
Commercial S-band downlink
http://ssl.engineering.uky.edu/missions/orbital/kysat1/about-kysat-1/

The primary mission objective for KySat-1 is educational outreach. For educational purposes KySat-1 can be commanded via mobile ground stations using amateur radio frequencies. Mobile ground stations will

be taken to schools around the state for children to have their first direct interaction with a satellite. Grade K-12 students and their teachers will be able to upload/download images and audio files, and will also have the capability to command the satellite to take photos using ground station software developed by the University of Kentucky Space Systems Laboratory.

The KySat-1 Team is requesting amateur satellite operators listen for the 436.790 MHz beacon after launch. Amateur stations who copy packets or beacons are invited send their data (decoded packets, audio recordings, signal reports) to ssl@engr.uky.edu.

The FM modulated pseudo-CW beacon transmits every 5 minutes at 32 wpm. The message that will be transmitted is "KYSAT-1 ... followed by the battery voltage to the tenth volt, and the processor temperature to the hundredth degree C.

The FM modulated AX.25 encoded digital beacon transmits every 2.5 minutes. The digital beacon consists of a header, six binary-coded decimal numbers separated by commas, and a 8 "bit" bitfield consisted of eight ascii bytes showing either a "1" or "0". Full details of the packet format:
http://ssl.engineering.uky.edu/missions/orbital/kysat1/operations/

Explorer-1 [Prime], University of Montana

437.505 MHz Downlink 1200 bps KISS/Custom Non-Coherent FSK
Every 15 seconds worldwide
http://ssel.montana.edu/e1p/

The primary mission consists of critical space weather observations for space weather forecasting and specification. The cubesat will monitor the flux of trapped electrons in the horns of the inner and outer radiation belts of the Van Allen radiation belts.

The E1P telemetry beacon consists of essential state of health information and a quick look payload data product. The quick-look data consists of one second averages of the intensity of energetic particles encountered along the spacecraft trajectory as provided by our Geiger-Mueller Counter.

A telemetry decoder can be downloaded from:
http://ssel.montana.edu/e1p/?page_id=
Hermes, University of Colorado

437.425 MHz Downlink
http://spacegrant.colorado.edu/

The primary mission is to 1) Create modular and extensible satellite subsystems; 2) Utilize S-Band frequencies to communicate at higher data rates than those obtainable with Ultra-High Frequencies (UHF); 3) Characterize Hermes' orbital environment and satellite status to validate models and design.

The primary communication system for the satellite is a UHF system
that transmits using a monopole antenna. The radio is a COTS Yaesu
VX-7R which transmits telemetry data using a TNC that was built by
students.

[ANS thanks the University of Kentucky, University of Montana, and
University of Colorado for the above information]

/EX

SB SAT @ AMSAT $ANS-051.02
ARISSat-1 Update

AMSAT News Service Bulletin 051.02
From AMSAT HQ SILVER SPRING, MD.
February 20, 2011
To All RADIO AMATEURS
BID: $ANS-051.02

The ARISSat-1 satellite is still inside the ISS. Roscosmos has announced
that the satellite will be deployed during the next EVA in July of this
year. The US team is trying to get clarification from Roscosmos about
the
"weak batteries" condition causing the satellite not to be deployed this
week. The news item can be found on the Roscosmos web site,
http://www.federalspace.ru/main.php?id=nid374 .

Roscosmos also announced that the satellite will be turned on inside the
ISS
and use an external antenna on 12 April 2011. This is to celebrate the
50th
anniversary of Yuri Gagarin's first manned space flight. AMSAT will
support
this event and issue certificates to those stations reporting reception
of
the ARISSat-1 signals.

Tony Monteiro, AA2TX has an excellent article describing the ARISSat-1
power
system using the Russian Olan suit battery in the upcoming AMSAT Journal
that
should be mailed to members next week.

[ANS thanks Gould, WA4SXM, for the above information]

/EX

SB SAT @ AMSAT $ANS-051.03
AMSAT India February 2011 Newsletter Published

AMSAT News Service Bulletin 051.03
From AMSAT HQ SILVER SPRING, MD.
February 20, 2011
To All RADIO AMATEURS

BID: $ANS-051.03

AMSAT India Secretary Nitin, VU3TYG advises that their February 2011
news letter is available for download. A PDF copy has been posted at:
http://amsatindia.org/Newsletter/AMSATINDIA-News-February2011.pdf
AMSAT India newsletter archives can be found on-line at:
http://www.amsatindia.org/Newsletter

Content of the February 2011 Newsletter includes:
1. Update on the Technical talk held on January 30th
2. Update on the Cubesat Transponder project by AMSAT INDIA.
3. Azimuth Elevation Rotator - A Homebrew approach by VU2POP
4. News from AMSAT organizations worldwide

[ANS thanks AMSAT India Secretary Nitin, VU3TYG for the above
information]

/EX

SB SAT @ AMSAT $ANS-051.04
Satellite Operation From Canary Islands Special Event Station

AMSAT News Service Bulletin 051.04
From AMSAT HQ SILVER SPRING, MD.
February 20, 2011
To All RADIO AMATEURS
BID: $ANS-051.04

EG8ISS in the Canary Islands will be active on both HF and the
Amateur Radio satellites between between February 12 through
March 11 from Las Palmas, Gran Canaria.

Activity is to celebrate/publicize the first ARISS (International
Space Station) contact with one of the "Institute for Technological
Development and Innovation in Communications" (IDeTIC) facilities
on campus.

The special event station will be on the HF bands, 40-10 meters,
using CW, SSB, RTTY, PSK31 and SSTV. Also, activities are planned
for VHF (2m FM local and R7 repeater) and the satellites (AO-27,
SO-50, AO-51 and VO-52).

There is a special QSL card designed for this event that will be
automatically mailed to your QRZ.com address.

More info is available on the QRZ.com under EG8ISS. A Twitter page
is also available at: http://twitter.com/eg8iss

[ANS thanks Ted, K7TRK and the SouthGateARC News site for the
above information]

/EX

SB SAT @ AMSAT $ANS-051.05
First Call for Speakers for AMSAT UK Colloquium 2011

AMSAT News Service Bulletin 051.05
From AMSAT HQ SILVER SPRING, MD.
February 20, 2011
To All RADIO AMATEURS
BID: $ANS-051.05

This is the first call for speakers for the AMSAT-UK Colloquium 2011 which will be held at the Holiday Inn, Guildford, UK from July 29 to July 31, 2011. This is the same venue as in 2010.

AMSAT-UK invite speakers, about amateur radio, space and associated activities, for this event.

Offers of talks should be sent ONLY to G4DPZ, via the following routes:
e-mail: david.johnson AT blackpepper.co.uk
SnailMail: QTHR from www.QRZ.com

AMSAT-UK also invite anyone with requests for Program Topics to submit them as soon as possible to G4DPZ. Invitations for specific subjects will be included in the future call.

Likewise if anyone knows of a good speaker, please send contact and other information to G4DPZ.

[ANS thanks Dave, G4DPZ for the above information]

/EX

SB SAT @ AMSAT $ANS-051.06
University Nanosat-6 Winner Announced

AMSAT News Service Bulletin 051.06
From AMSAT HQ SILVER SPRING, MD.
February 20, 2011
To All RADIO AMATEURS
BID: $ANS-051.06

The team from the Houghton, Michigan college won first place in this year's University Nanosat Program (UNP) Nanosat 6 competition with their Oculus-ASR nanosatellite. The UNP competition was conceived in 1999 as a means to "sustain and promote university research and education focused on small satellites. This program was developed by the Air Force Office of Scientific Research (AFOSR) in conjunction with the Air Force Research Laboratories Space Vehicle Directorate (AFRL/RV). For this competition a nansat is defined as 50kg in mass (or less) and 50 x 50 x 60 cm or smaller.

The name Oculus comes from its operating as an "orbiting eye" for the Department of Defense. The DoD (and many other organizations) have a vested interest in the observation and tracking of the many asteroids neighboring the earth.

According to the MTU Aerospace Enterprise team blog Oculus-ASR should launch in 2013. The MTU nanosat has shape-shifting capabilities that

are important to ground-based observations and measurement. Imaging of the asteroids and other space objects will then be compared with ground-based observations too. The Oculus-ASR's work will be of great importance to the DoD's need to know what is orbiting the earth and what those

objects are doing.

[ANS thanks AFRL and Michigan Tech News for the above information]

/EX

SB SAT @ AMSAT $ANS-051.07
Satellite Shorts From All Over

AMSAT News Service Bulletin 051.07
From AMSAT HQ SILVER SPRING, MD.
February 20, 2011
To All RADIO AMATEURS
BID: $ANS-051.07

+ Robb, N0KGM has posted a two way video capturing a ham radio contact both with Doug Wheelock on the ISS and his home QTH at the same time at: http://vimeo.com/19854803

+ Roland PY4ZBZ has a very interesting web page showing reception and telemetry decoding of several satellites. This page also has a grid map showing the 36 wet grid squares with contacts with Yuri, UT1FG/MM during his ocean voyage around South America: http://www.qsl.net/py4zbz/satelite.htm#y

+ KA1SKY Ham Radio Station was dedicated on February 14, 2011 at the McAuliffe-Shepard Discovery Center, Concord, NH in conjunction with the Contoocook Valley Radio Club (CVRC) and the New England Amateur Radio Festival (NEAR-Fest). This includes an amateur radio station KA1SKY with full operational capabilities. KA1SKY has been heard operating the amateur radio satellites. (Nick, KB1RVT)

+ Photos of Commander Dimitri Kondratyev with the Kedr/Arissat satellite connected inside the ISS on 10 February can be found at: http://www.federalspace.ru/main.php?id)3 (Andy, G0SFJ)

+ A video of Earth-Moon-Earth (EME) Amateur Radio station HB9MOON has been released showing a Moonbounce demonstration dedicated to the Google Science fair experiment, "How do you measure the distance between Earth and the Moon?" The video is on the SouthGate site at: http://tinyurl.com/6kmr7nf

+ A new schedule was uploaded to AO-27 on February 5. Users of the AO-27 Java schedule lister should make sure they update their data files. The schedule lister is available for download at: http://sites.google.com/site/ao27satelliteschedulers/
(George, KA3HSW)

+ Dimitrios, SW1JGW has posted a video of VO-52 satellite reception using Genesis G59 software defined radio with a TenTec 1210 10M to 2M transverter at: http://www.youtube.com/watch?v=lh2bOs34I

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-051.08
Four Successful ARISS Contacts Held this Week

AMSAT News Service Bulletin 051.08
From AMSAT HQ SILVER SPRING, MD.
February 20, 2011
To All RADIO AMATEURS
BID: $ANS-051.08

On Thursday, February 10, an Amateur Radio on the International Space Station (ARISS) contact was held between astronaut Paolo Nespoli, IZ0JPA and Istituto Comprensivo Statale "E. Fermi - A. Oggioni," Villasanta, Monza Brianza, Italy via telebridge station VK5ZAI in Australia. During the ISS pass Nespoli answered 19 questions and exchanged greetings with the youth. An audience of approximately 200 students and others were on hand for the contact and afterwards, students sang the well known hit "Volare" which means "To fly." Regional and local media and newspapers covered the event and streaming video, provided by AMSAT-Italia, received 80 connections.

On-orbit astronaut Cady Coleman, KC5ZTH participated in an ARISS contact with Lake Silver Elementary School students in Orlando, Florida on February 10 via radio station LU8YY in Argentina. Coleman answered 14 questions as a large crowd of students, parents and guests gathered for the event. The school put together a comprehensive education plan to compliment this ARISS contact.

An ARISS contact was held between Lillestr0m videreg0ende skole, Lillestr0m, Norway and Cady Coleman, KC5ZTH on the ISS on Friday, February 11. Station W5RRR in Houston, Texas handled the radio connection. Over 150 people assembled for the event and listened as the astronaut fielded eight questions, mainly in Norwegian. The contact was the highlight of a science and applied technology curriculum.

National Institute for Astrophysics - Astronomical Observatory of Bologna, Bologna, Italy took part in an ARISS contact on Saturday, February 12 via telebridge station LU8YY in Argentina. Italian astronaut Paolo Nespoli, IZ0JPA participated from the ISS, answering 16 questions. Approximately 150 people were present for the contact which occurred during the Bologna science festival, "Scienza in Piazza," held February 3 - 13. The festival focuses on schools, promoting science through hands-on exhibitions and conferences and is backed by the Italian Space Agency (ASI). Regional and local media and

newspapers covered the event.

The audio from all contacts was available on EchoLink and IRLP
(Internet Radio Linking Project).

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the
President's Club. Members of the President's Club, as sustaining
donors to AMSAT Project Funds, will be eligible to receive addi-
tional benefits. Application forms are available from the AMSAT
Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

27. Using icom910h to receive BPSK at higher data rates

Newsgroup: rec.radio.amateur.space
Date: 2011-02-21 22:26:44 UTC
From: vikku <vikku2287@gmail.com>
Message-ID: <cccfd256-2091-4668-a2d3-e88c3daa2fff@k16g2000vbq.googlegroups.com>
Source record: 453

Hi i have a question regarding using icom910h to receive BPSK signals
at a data rate greater than 1200bps . I was stuck with this question
because the intermediate signal (signal from the is 1600 Hz) can
accommodate a 1200bps signal easily but to accommodate a signal
greater than 1600bps would be tough as the phase of the signal cannot
be recognized (my assumption). My doubt is regarding my assumption
and is my assumption correct. Also i have not worked a lot on icom 910
so i wanted to know if there is any possibility to change this
intermediate frequency from the transceiver.
In short: What are the settings i need to change to receive a BPSK
signal which has a higher data rate?
Thank you in advance for your reply

28. Crossposting Permitted to rec.radio.amateur.moderated

Newsgroup: rec.radio.amateur.space
Date: 2011-03-01 07:00:02 UTC
From: rram@panix.com
Message-ID: <radio/ham-radio/moderated/crossposting-1-1298962801@panix.com>
Source record: 454
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.info

```
Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/moderated/crossposting
Revision: 1.1 2009/04/12 19:42:04
Posting-Frequency: posted monthly
URL: http://www.panix.com/~rram/usenet/rram/index.html

Changes followed by "|".

After a 30-day public discussion and feedback period to gauge reader
opinions in March of 2009:

http://groups.google.com/group/rec.radio.amateur.moderated/browse_thread/thread/d7d337db35
f23326

the rec.radio.amateur.moderated Moderation Team has decided to consider
amending its charter, and permit limited simultaneous crossposting to
rec.radio.amateur.moderated and one other unmoderated
amateur-radio-related discussion newsgroup. We are currently trying
this on a temporary basis (90 days, through early July 2009), and adopt
it permanently if successful.

Approved rec.radio.amateur.* newsgroups are those that are currently
listed in the latest version of the "List of Big Eight Newsgroups" which
is crossposted monthly to news.announce.newgroups, news.groups, and
news.lists.misc.

Approved alt.radio.amateur.* and alt.ham-radio.* newsgroups are those
that have been created consistent with the suggestions in "So You Want
to Create an Alt Newsgroup" at:

http://www.faqs.org/faqs/alt-creation-guide/

Approved regional hierarchy newsgroups are those that contain either
"radio.amateur" or "ham-radio" in their names, including
uk.radio.amateur and aus.radio.amateur.misc.

We will make every reasonable effort to keep our list of approved
newsgroups up-to-date. In case we have overlooked any, and a submission
is rejected in error as a result, the rejected submitter can E-mail us
at our administrative contact address (in the signature at the bottom of
this article, and the default Reply-To for the rejection message)
requesting that it be added, and that the article be approved. We may
still choose to reject articles crossposted to any alt.* newsgroup with
an inappropriate name, including obscene language, embedded
name-calling, or encouragement of unlawful conduct.
```

Please direct any comments, questions, or criticisms to
rec-radio-amateur-moderated-request@panix.com.

29. ANS-058 AMSAT News Service Weekly Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2011-03-01 17:10:07 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <003001cbd833$7d171eb0$77455c10$@net>
Source record: 455
Cross-posted to: rec.radio.amateur.space,rec.radio.info

AMSAT NEWS SERVICE
ANS-058

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:
* Electronic Nominating Procedures Announced for AMSAT-NA Elections
* SA AMSAT Space Symposium on April 2, 2011
* SA-AMSAT Decides on UV Linear Transponder for Kletskous Payload
* NASA Assessing New Launch Dates For The Glory Mission
* Wide selection of Modes is scheduled for AO-51
* Satellite Shorts From All Over
* ARISS CONTACTS
* Spectrum Management Bill Threatens 70cm Amateur Satellite Frequencies

SB SAT @ AMSAT $ANS-058.01
Electronic Nominating Procedures Announced for AMSAT-NA Elections

AMSAT News Service Bulletin 058.01
>From AMSAT HQ SILVER SPRING, MD.
February 27, 2011
To All RADIO AMATEURS
BID: $ANS-058.01

AMSAT has in the past required written submission of nominating petitions for the Board of Directors, usually gathered at hamfests or other meetings, to be received at the AMSAT office no later than June 15th. This procedure will remain available, unchanged, and is the preferred method.

However, in the decades since the founding of AMSAT, electronic communications, once limited to the few at government or other technical facilities, have become readily available. This has prompted a review of the nominating procedures used at comparable organizations.

Beginning with 2011 AMSAT Board of Directors election, a supplemental method, using electronic submissions, will be available.

This will be a two step process:

1. Preliminary nominating petitions may be made by FAX, PDF, or similar electronic means. As with the written version, this petition must be from one Member Society, or five AMSAT-NA members in good standing, and received at the AMSAT office by June 15th. This will allow nominations up to the last day to cover a last minute withdrawal or declaration of candidacy.

2. However, in accordance with the AMSAT Bylaws, there remains a requirement of a confirming written nominating petition. This must be received at the AMSAT office no later than 7 days after June 15th.

In effect, by submitting a petition electronically, you extend the deadline for the written petition to be received by 7 days. Electronic submissions without this second, written petition are not valid under the existing AMSAT Bylaws. More extensive changes, for instance to a fully electronic method, will require an amendment of the Bylaws.

The addresses, FAX number, and requirements for submission will be provided in the formal call for nominations published in the AMSAT Journal.

Alan Biddle
WA4SCA
AMSAT Corporate Secretary

[ANS thanks AMSAT Corporate Secretary Alan Biddle, WA4SCA for the above information]

/EX

SB SAT @ AMSAT $ANS-058.02
SA AMSAT Space Symposium on April 2, 2011

AMSAT News Service Bulletin 058.02
From AMSAT HQ SILVER SPRING, MD.
February 27, 2011
To All RADIO AMATEURS
BID: $ANS-058.02

The 2011 SA AMSAT Space Symposium will be held in Gauteng on Saturday, April 2, 2011 at Vodaworld, Midrand in South Africa.

If you book before March 15 you receive a discount on the registration fee. Download the registration form from http://www.amsatsa.org.za/ Registration fee includes refreshments and lunch.

Symposium Highlights:

+ Keynote Address: Sandile Malinga CEO of SANSA
+ RaDAR- Rapid Deployed Amateur Radio
+ SA AMSAT Satellite projects:
SAiSAT
KLETSkous

+ The African Space Institute: the first year of blood, sweat
and space.
+ Cryogenic receiver systems for the KAT-7 and MeerKAT projects
+ The CHEETAH-1 CSLV-Moving Toward Independent Access to Space
for South Africa
+ CPUT - Student Satellite projects

[ANS thanks SA AMSAT for the above information]

/EX

SB SAT @ AMSAT $ANS-058.03
SA-AMSAT Decides on UV Linear Transponder for Kletskous Payload

AMSAT News Service Bulletin 058.03
From AMSAT HQ SILVER SPRING, MD.
February 27, 2011
To All RADIO AMATEURS
BID: $ANS-058.03

SA-AMSAT has started the development of a Cubesat project. It has been named Project KLETSkous during its development phase. Once the satellite nears completion it is plannedto run a competition to decide on an applicable name for the satellite as was the case for SumbandilaSat.

Project KLETSkous reflects nicely on the mission and functionality of the satellite: "Klets" is an Afrikaans work for talking a lot. We want the Southern African radio amateurs to talk and operate much more via satellite. "Kous" is the Afrikaans word for a sock. The transponder that is planned for the satellite can also be referred to as a "bent-pipe" transponder, aligning the idea to the "sock".

SA-AMSAT this week announced that the main payload on the KLETSkous CubeSat will be a linear UV transponder with a bandwidth of 20 kHz. The UV mode which is 70 cm uplink and 2 meter downlink was chosen in line with internationally recommended practice as it will minimize interference.

The aim is to have it operating over Africa without the need of an access tone to open the transponder to give Amateurs with modest equipment easy access to the satellite. For the rest of the world where the Amateur population is denser, tone access will be required to reduce unwanted interference even on 70 cm uplinks.

For educational purposes a beacon and parrot functionality may be highly desirable. Proposals for additional payloads will be considered. It should however be remembered that the amount of available power is a limiting factor.

Fundraising for the project has started in all earnest and radio amateurs are invited to make contributions to the fund.

Visit http://www.amsatsa.org.za/KLETSkous.htm for bank details and more about the KLETSkous project.

[ANS thanks SA AMSAT for the above information]

/EX

SB SAT @ AMSAT $ANS-058.04
NASA Assessing New Launch Dates For The Glory Mission

AMSAT News Service Bulletin 058.04
From AMSAT HQ SILVER SPRING, MD.
February 27, 2011
To All RADIO AMATEURS
BID: $ANS-058.04

[Editor Note: This is the launch from Vandenberg AFB that includes the University of Kentucky, University of Montana, and University of Colorado cubesats announced in ANS-051.]

WASHINGTON -- Preparations for the launch of NASA's Glory mission from Vandenberg Air Force Base in California have been suspended temporarily. Engineers continue to troubleshoot a malfunction in ground support equipment associated with the Taurus XL rocket.

On Feb. 23, a false indication was received about the rocket's status after commands were sent approximately 15 minutes before launch to activate the Taurus.

"We had an indication that a 'hold-fire' command was sent when indeed it had not," said Omar Baez, NASA launch director.

The commands originated from the Vehicle Interface Control Console in the mobile launch support van stationed a few miles from the launch pad. The problem has not yet been isolated, and trouble-shooting continues. Managers are evaluating possible Glory launch opportunities in early to mid-March.

"The Glory spacecraft is doing fine," reported Bryan Fafaul, Glory project manager from NASA's Goddard Space Flight in Greenbelt, Md. "We are continuing to slow charge the battery until we have a new launch date."

The Glory satellite will be launched aboard a Taurus on a mission to improve our understanding of how the sun and tiny atmospheric particles called aerosols affect Earth's climate. Glory launch management is provided by NASA's Launch Service Program at the agency's Kennedy Space Center in Florida. Orbital Sciences Corp. is providing the Taurus XL launch vehicle and is responsible for spacecraft operations.

For status updates on the Glory launch, visit:
http://www.nasa.gov/glory

[ANS thanks NASA for the above information]

/EX

SB SAT @ AMSAT $ANS-058.05
Wide selection of modes is scheduled for AO-51

AMSAT News Service Bulletin 058.05
From AMSAT HQ SILVER SPRING, MD.
February 27, 2011
To All RADIO AMATEURS
BID: $ANS-058.05

Here is the AO-51 schedule for the next few weeks. There is
a little bit of something for everyone in here!

Keep in mind that the schedule is subject to change due to
power budget and/or telemetry downloading.

AO-51 Mode Change Schedule(updated 2/27/11)

February 21 (~2145 UTC) [Eclipses should end around Feb. 24/25]

Dual Voice Repeaters :
Mode V/U FM Voice Repeater (no PL tone needed)
Uplink: 145.920 MHz FM
Downlink 435.300 MHz FM

Mode L/U FM Voice Repeater (no PL tone needed)
Uplink: 1268.703 MHz FM
Downlink 435.150 MHz FM

March 1 (~1005 UTC)

Mode V/S Voice Repeater (no PL tone needed)
Uplink: 145.880 MHz FM
Downlink 2401.200 MHz FM

March 4 (~0945 UTC)

Mode V/U FM Voice Repeater (no PL tone needed)
Uplink: 145.920 MHz FM
Downlink 435.300 MHz FM

Mode L/U PacSat BBS
Uplink: 1268.703 MHz FSK 9k6 baud
Downlink 435.150 MHz FSK 9k6 baud

March 6 (~2115 UTC)

Mode L/SU FM Voice Repeater (no PL tone needed)
Uplink: 1268.703 MHz FM
Downlink1 2401.200 MHz FM
Downlink2 435.300 MHz FM (low power)

March 11 (~1000 UTC) [Eclipses return around March 12/13]

Mode V/U FM Voice Repeater (no PL tone needed)
Uplink: 145.920 MHz FM

Downlink 435.300 MHz FM

Mode L/U PacSat BBS
Uplink: 1268.703 MHz 9k6 baud
Downlink 435.150 MHz 9k6 baud

As always, command stations may need to reconfigure modes in
order to collect telemetry as needed.

Remember that power management may be running, and the
transmitter(s) will shut OFF during periods of eclipse
and/or low battery voltage.

73,

Mark N8MH
AO-51 Command Team

[ANS thanks Mark, N8MH & Team for the above information]

/EX

SB SAT @ AMSAT $ANS-058.06
Satellite Shorts From All Over

AMSAT News Service Bulletin 058.06
From AMSAT HQ SILVER SPRING, MD.
February 27, 2011
To All RADIO AMATEURS
BID: $ANS-058.06

+ David Jordan AA4KN's excellent article on working ARISSat-1 that
was published in the February, 2011 issue of QST magazine is
available for download: http://tinyurl.com/work-arissat1 It is a
1.1MB .pdf document. (Thanks Clint, K6LCS)

+ Roscosmos has announced that ARISSat-1, still inside the ISS will
be turned on using an external antenna on Yuri's Night, April 12,
2011 to celebrate the 50th anniversary of Yuri Gagarin's first manned
space flight. AMSAT will support this event and issue certificates
to those stations reporting reception of the ARISSat-1 signals.
Yuri's Night is a global event with more information available
on-line at: http://yurisnight.net/

+ Listen for possible satellite operation from the Camb-Hams DXpedition
from the Isle of Arran (Grid IO75HO) between May 1-8, 2011. Their
latest information can be found on-line at: http://dx.camb-hams.com/

+ The next Hudson Valley Satcom Net date is Thursday, March 3 at 8PM
EST (UTC-5) on the 146.970MHz Repeater (-600;Pl 100) and on the
echolink node of N2EYH-L. More info: http://www.hvsatcom.org
(Stu,WA2BSS)

+ The Florida AMSAT net is held every Thursday evening at 7:30pm Eastern

Time (UTC-5). Many Florida repeaters are connected together for this net but others are welcome to join by using the AMSAT Echolink Conference Node. Mike N4HHA is usually the moderator. Bring your questions and news items to share. (John K8YSE/4)

+ Several videos of the innovative KySat-1 CubeSat are available: http://tinyurl.com/4zodwy8 (SouthGateARC)

+ Movies of Comet Tempel 1 encounter by Stardust-NExT can be viewed at: http://tinyurl.com/4tnbwan (UniverseToday.com)

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-058.07
ARISS Contacts

AMSAT News Service Bulletin 058.07
From AMSAT HQ SILVER SPRING, MD.
February 21, 2011
To All RADIO AMATEURS
BID: $ANS-058.07

1. School Contacts

Preston North East Primary School in Preston, Victoria, Australia had an Amateur Radio on the International Space Station (ARISS) contact on Tuesday, February 22 at 08:04 UTC via telebridge station W5RRR in Houston. The contact was successful. Students in Grades 5 and 6 have been engaged in an integrated unit of work that focuses on Earth and the Solar System. The students have been learning why we are able to live on Earth and why other planets are not suitable to sustain human life.

Nishibori Eizaburo Memorial Explorer Museum Radio Club, located in Higashiomi, Shiga, Japan had a successful Amateur Radio on the International Space Station (ARISS) contact on Tuesday, February 22. The radio club is an independent club that used the museum facilities for this event. Children are learning about the ISS mission and space science and it is hoped that the contact will pique student interest in science and space technology.

Students from Matsubara High School, located in Matsubara, Osaka, Japan, experienced an Amateur Radio on the International Space Station (ARISS) contact with U.S. astronaut Cady Coleman, KC5ZTH on Monday, February 14. The contact, which highlighted lessons on radios and the ISS, was attended by approximately 200 people. Media representatives from 3 newspapers, one radio station and 3 television stations, including NHK (Japan Broadcasting Corporation) covered the event.

On Thursday, February 17, students attending "Claudio Varalli," and "Salvador Allende" High Schools in Milano, Italy participated in an ARISS contact with ESA astronaut Paolo Nespoli, IZ&#65533;JPA on the ISS. Telebridge station W5RRR in Houston handled the connection. Varalli,

which has both a technical school and a secondary school that focuses on foreign languages, has a radio club station, IZ2SHS that is used to practice languages. "Salvador Allende" emphasizes three courses of study in science, humanities and accounting. More than 100 students, teachers and visitors attended the event and listened as Nespoli fielded 16 questions posed to him by the students. Regional and local media covered the contact, which was available on EchoLink and streamed on the Web.

An ARISS contact was held between youth visiting Experiencing Learning, "Imparare Sperimentando," in San Quirino, Italy and on-orbit astronaut Paolo Nespoli, IZ0JPA on Saturday, February 19 via station LU8YY in Argentina. A crowd of approximately 400 people gathered at Imparare Sperimentando, an interactive exhibition that covers a wide variety of physics experiments and science, and watched as the students asked 16 questions of the astronaut. Regional and local media covered the event. The audio was fed into EchoLink and streaming video was provided by AMSAT-Italia.

3. Kentucky Standard Says ARISS Inspires Students to Study Science

The Kentucky Standard Editorial Board printed an article about the recent ARISS - Foster Heights Elementary School contact, made possible with the help of Nelson County Area Technology Center students, and how this activity inspires children to learn more about science and technology. The story talks about how the radio contact fits in with President Barack Obama's recent State of the Union address on how the nation needs to encourage students to learn and excel, especially in math and science. See:
http://www.kystandard.com/content/space-contact-may-increase-science-and-math-interest

4. ARISS International Team Meeting Held

The ARISS International Team met for its monthly teleconference on Tuesday, February 15. Discussions included the upcoming ARISS-I face to face meeting, as well as status reports on Columbus Module projects and ARISSat-1 plans. Minutes have been posted to the ARISS Web site.
https://www.rac.ca/ariss/arisstel2011-02-15.htm

5. AMSAT - ARISSat-1 Updates

On February 20, the AMSAT (Radio Amateur Satellite Corporation) News Service bulletin (ANS-051) provided a status on ARISSat-1. Roscosmos has delayed the deployment of ARISSat-1 until the next Russian EVA scheduled in July. On April 12, the crew will connect the satellite, while still inside the ISS, to anexternal antenna and turn it on in celebration of the 50th anniversary of Gagarin's first manned spaceflight. For more information, see:
http://amsat.org/pipermail/ans/2011/000488.html

6. ARRL - Doug Wheelock will be Guest at Dayton Hamvention

The American Radio Relay League (ARRL) posted a story in its February 17 ARRL Letter about astronaut Doug Wheelock's plans to attend the Dayton Hamvention which will be held May 20-22, 2011. Wheelock will talk about his stay on the ISS, his contacts with school children and his many general contacts with hams. For the full story, "Astronaut Doug Wheelock, KF5BOC, to Be Guest of ARRL and AMSAT at Hamvention,&#65533;" go to:
http://www.arrl.org/news/astronaut-doug-wheelock-kf5boc-to-be-guest-of-arrl-and-amsat-at-hamvention

7. Astronaut Training Status

Three astronauts were given the ARISS Basic Operations class this past week. Kevin Ford, KF5GPP (Expedition 33), Chris Cassidy (Expedition 35) and Akihiko Hoshide, KE5DNI (Expedition 32) all participated in the training sessions.

8. Amateur Radio Newsline Covers ARISSat

On February 18, the Amateur Radio Newsline Report 1749 posted the story, "Ham Radio in Space: ARISSat-1 Deployment Delayed until July." The story covers the recent events affecting the satellite.
See: ftp://ftp.arnewsline.org/quincy/News/news.txt

[ANS thanks Carol, KB3LKI, for the above information]

/EX

SB SAT @ AMSAT $ANS-058.08
Spectrum Management Bill Threatens 70cm Amateur Satellite Frequencies

AMSAT News Service Bulletin 058.08
From AMSAT HQ SILVER SPRING, MD.
February 27, 2011
To All RADIO AMATEURS
BID: $ANS-058.08

The ARRL and AMSAT are closely monitoring progress on a new bill HR-607, the Broadband for First Responders Act of 2011, introduced by Representative Peter King (R-NY-3), Chairman of the House Homeland Security Committee. At present the bill has been referred to the House Energy and Commerce Committee, which handles telecommunications legislation.

Several blocks of spectrum are proposed for auction. There are several bills in Congress providing for the allocation of the D-Block (758-763 and 788-793 MHz) for Public Safety use, and HR-607 is one of those.

But HR-607 uniquely provides for the reallocation of other spectrum for auction to commercial users, in order to offset the loss of revenue that would occur as the result of the allocation of the D-Block to Public Safety instead of commercial auction. The band of 420-440 MHz is listed among the bands to be reallocated for commercial

auction within 10 years of passage of HR-607.

A full article on this topic is posted on the ARRL web at:
http://tinyurl.com/4prgouq (arrl.org)

[ANS thanks the ARRL for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Dee Interdonato, NB2F

30. WSR-063 AMSAT Weekly Satellite Report

Newsgroup: rec.radio.amateur.space
Date: 2011-03-05 02:29:46 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <001e01cbdadd$2adbda30$80938e90$@net>
Source record: 456
Cross-posted to: rec.radio.amateur.space,rec.radio.info

```
This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-063.S1
WSR 063 Part 1 03/04/2011

AMSAT NEWS SERVICE BULLETIN 063.S1
FROM AMSAT HQ SILVER SPRING, MD, March 04, 2011
TO ALL RADIO AMATEURS
BID: $WSR-063.S1

HO-68 HOPE-1 (CAS-1)(XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009 0231z
Launch site: Taiyuan Space Center, PRC

Status: By schedule

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
145.9250 - 145.9750 MHz SSB/CW
145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
435.7650 - 435.7150 MHz SSB/CW
435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[02092011]
=====
SO-67 SumbandilaSat
```

Catalog Number: 35870
Launch Date: September 17, 2009 1555z
Launch site: Baikonur, Kazakhstan

Status: By schedule

Callsign: ZS0SUM

Uplink: 145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/
[02092011]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[02092011]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05, 2005 0444z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.9360 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[02092011]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004 0745z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode(s):
Voice repeater: V/u
Uplink: 145.920 MHz FM
Downlink: 435.300 MHz FM

Packet BBS: L/s
Uplink: 1268.703 mhz FM 9k6 Pacsat Broadcast Protocol
Downlink: 435.150 MHz FM 9k6 Pacsat Broadcast Protocol

Telemetry: By Command ONLY
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.880 MHz FM
145.920 MHz FM
145.920 MHz FM - 67 Hz PL tone burst
1268.705 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.703 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear

S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[03042011]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002 1700z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4
Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the re-
peater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
the 10 minute timer.
[02092011]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993 0140z
Launch site: Kourou, French Guiana

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear

U: Linear

Official Webpage: http://www.ao27.org
[02092011]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974
Launch site: Vandenberg AFB, California, USA

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
145.972 MHz CW
435.100 MHz CW
2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02092011]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
Kourou, French Guiana
Uchinoura Space Center, Japan
Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - OFF
APRS - OFF
SSTV - OFF

Expedition 26 Crew:
Commander: Scott Kelly
Flight Engineer: Alexander Kaleri U8MIR
Flight Engineer: Oleg Skripochka RN3FU
Flight Engineer: Dmitry Kondratyev
Flight Engineer: Catherine Coleman KC5ZTH

Flight Engineer: Paolo Nespoli IZ0JPA

STS-133 Discovery Crew:
Commander: Steven Lindsey
Pilot: Eric Boe
Mission Specialist: Alvin Drew
Mission Specialist: Michael Barratt KD5MIJ
Mission Specialist: Steve Bowen
Mission Specialist: Nicole Stott KE5GJN

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[02252011]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-063.S2
WSR 063 Part 2 03/04/2011

AMSAT NEWS SERVICE BULLETIN 063.S2
FROM AMSAT HQ SILVER SPRING, MD, March 04, 2011
TO ALL RADIO AMATEURS
BID: $WSR-063.S2

O/OREOS
Catalog Number: 37224
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.035 MHZ AX.25

Beacon:

Callsign:

URL: http://www.ooreos.org/
[02092011]
=====
Rax-1 Radio Aurora Explorer
Catalog Number: 37223
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.505 MHz 9k6 GMSK

Beacon:

Callsign: RAX-1

URL: http://rax.engin.umich.edu/
[02092011]
=====
Fastrac-1 Sara Lily
Catalog Number: 37225
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On orbit

Uplink 1: 145.980 MHz 1k2 baud
Uplink 2: 145.825 MHz 1k2 baud
Downlink: 437.345 MHz 1k2 and 8k6 baud

Beacon: 437.435 MHz 1k2 AX.25

Callsign: Fast1

URL: http://fastrac.ae.utexas.edu/index.php
[02092011]
=====
Fastrac-2 Emma
Catalog Number: 37227
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink 1: 435.025 MHz 1k2 baud
Uplink 2: 437.435 MHz 9k6 baud
Downlink: 145.825 MHz

Beacon: 145.825 MHz 1k2 AX.25

Callsign: Fast2

URL: http://fastrac.ae.utexas.edu/index.php
[02092011]
=====
StudSat
Catalog Number: 36796
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink: 437.505MHz, 9600bps FSK
Downlink: 437.505MHz, 9600bps FSK
Beacon : 437.505MHz, 20bps ASK
[02092011]
=====
TIsat-1
Catalog Number: 36799
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On orbit

Callsign: HB9DE

Uplink: 145.980MHz FM, AFSK
Downlink: 437.305MHz FM, AFSK
Beacon: 437.305MHz CW
[02092011]
=====
HO-68 HOPE-1 (CAS-1)(XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009 0231z
Launch site: Taiyuan Space Center, PRC

Status: By schedule

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
145.9250 - 145.9750 MHz SSB/CW
145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
435.7650 - 435.7150 MHz SSB/CW
435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[02092011]
=====
SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w): 437.5050MHz FSK 1k2bps
[02092011]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
437.3850 MHz FSK 9k6bps
[02092011]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps
[02092011]
=====

BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
Beacon(500mw): 436.000MHz GMSK 9k6bps
[02092011]
=====
CP-6
Catalog Number: 35003
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: Operational

Downlink: 437.365 MHz 1k2 AFSK
[02092011]
=====
HAWKSAT 1
Catalog number: 35004
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: operational

Downlink: 437.345 MHz ?
[02092011]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: Operational

Downlink: 437.465 MHz 1k2 AFSK
[02092011]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009 0115z
Launch Site: Satish Dhawan Space Centre, India

Status: ?

Downlink: 435.000 MHz
Uplink: 145.800 MHz

Telemetry: 137.400 MHz
[02092011]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon: 437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[02092011]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: In Orbit

Downlink: 437.375 MHZ FSK9k6/CW
Beacon: 437.375 MHz FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[02092011]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
437.465 MHz FM/CW
Beacons: 437.305 MHz FM/CW
437.275 MHz FM/CW

Callsigns: JR5YBN
JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL

=/satellites/status.php
[02092011]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Downlink: 437.455 MHz AFSK/CW
Beacon: 437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[20092011]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon: 437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[02092011]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008 1520z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Curent Modes: Telemetry
Audio
Images

Downlinks: 435.315 MHz
435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02092011]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web
page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[02092011]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[02092011]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Digipeater

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL
=/satellites/status.php
[02092011]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Current Mode: 4k8 MSK packet

Uplink: 145.980 MHz FM
Downlink: 437.275 Mhz CW
437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[02092011]
=====
CO-66 Seeds II
Catalog number:
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web
page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL
=/satellites/status.php
[02092011]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[02092011]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[02092011]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005 0652z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[02092011]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: ?????

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[02092011]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004 0745z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode(s):
Voice repeater: V/u
Uplink: 145.920 MHz FM
Downlink: 435.300 MHz FM

Packet BBS: L/s
Uplink: 1268.703 mhz FM 9k6 Pacsat Broadcast Protocol
Downlink: 435.150 MHz FM 9k6 Pacsat Broadcast Protocol

Telemetry:
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.880 MHz FM
145.920 MHz FM

145.920 MHz FM - 67 Hz PL tone burst
1268.700 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.708 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[030492011]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[02252011]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Current Mode: CW downlink worldwide
AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php
[02092011]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001 0240z
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[02092011]
=====
RS-22 RADIO SPORT 22 (MOZHAYETS 4)
Catalog number: 27939
Launch Date: September 27, 2003 0612z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02092011]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990
Launch site: Kourou, French Guiana

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
145.860 MHz 1200-baud Manchester FSK
145.880 MHz 1200-baud Manchester FSK
145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[02092011]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984
Launch site: Vandenburg AFB, California, USA

Status: Operational

Current Mode: /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz
Mode-S Beacon: 2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[02092011]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
Kourou, French Guiana
Uchinoura Space Center, Japan
Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - OFF
APRS - OFF
SSTV - OFF

Expedition 26 Crew:
Commander: Scott Kelly
Flight Engineer: Alexander Kaleri U8MIR
Flight Engineer: Oleg Skripochka RN3FU
Flight Engineer: Dmitry Kondratyev
Flight Engineer: Catherine Coleman KC5ZTH
Flight Engineer: Paolo Nespoli IZ0JPA

STS-133 Discovery Crew:
Commander: Steven Lindsey
Pilot: Eric Boe
Mission Specialist: Alvin Drew
Mission Specialist: Michael Barratt KD5MIJ
Mission Specialist: Steve Bowen
Mission Specialist: Nicole Stott KE5GJN

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[02252011]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-063.S3
WSR 063 Part 3 03/04/2011

AMSAT NEWS SERVICE BULLETIN 063.S3
FROM AMSAT HQ SILVER SPRING, MD, March 04, 2011
TO ALL RADIO AMATEURS
BID: $WSR-063.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NANOSAIL-D
Catalog Number:
Ejection Date: January 17, 2011

Status: On orbit

Downlink: 437.270 MHz AX.25

URL: http://nanosaild.engr.scu.edu/dashboard.htm
[01272011]
=====
CP4
Catalog Number: 31132
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[09062010]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[09062010]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[09062010]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.250

Official Website: http://www.ncube.no
[09062010]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink 2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[09062010]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[09062010]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks: 145.850 MHz
145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks

V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON General Beacon(GB) Middle Beacon(MB) Engineering Beacon(EB)
2 m none 145.898 MHz none
70cm 435.438 MHz 435.588 MHz 435.838 MHz
13cm(1) 2400.188 MHz 2400.338 MHz 2400.588 MHz
13cm(2) 2401.173 MHz 2401.323 MHz 2401.573 MHz
3cm 10450.975 MHz 10451.125 MHz 10451.375 MHz
1.5cm 24047.885 MHz 24048.035 MHz 24048.285 MHz
[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
145.890 FM
145.930 FM
1269.700 FM
1269.800 FM
1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[07172010]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink: 435.1380 MHz AFSK 1200 BPS
Downlink: 435.2060 MHz AFSK 1200 BPS
Uplink: 145.8150 MHz AFSK 1200 BPS
Uplink: 145.8350 MHz AFSK 1200 BPS
Uplink: 145.8550 MHz AFSK 1200 BPS
Uplink: 145.8750 MHz AFSK 1200 BPS
[06042009]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Non-operational
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
145.870 MHz FM
145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[11062010]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks: 145.875 MHz FM 1200-baud
145.900 MHz FM 1200-baud
145.925 MHz FM 1200-baud
145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html

[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink: 435.0625 MHz FM 1k2bps AFSK
435.1125 MHz FM 1k2bps AFSK
435.1375 MHz FM 1k2bps AFSK
Downlink: 145.9750 MHz FM 1k2bps AFSK
2446.5025 MHz FM 1k2bps AFSK

Beacon: 2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink: 435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons: 435.795 MHz CW
435.910 MHz AX25

Voice Transponder:
Uplink: 145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks: 145.850 MHz
145.870 MHz
145.890 MHz
145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz

[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode: V/u

Uplink: 145.900 MHz FM 1200-baud Manchester FSK (reserved)
145.920 MHz FM VOICE
145.940 MHz FM 1200-baud Manchester FSK (reserved)
145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink: 437.026 MHz USB VOICE
(1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink: 145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909

Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink: 145.8500 MHz MFSK 1200 BPS
Uplink: 145.8700 MHz MFSK 1200 BPS
Uplink: 145.8900 MHz MFSK 1200 BPS
Uplink: 145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.8500 - 145.9000 MHz SSB/CW
Downlink 29.4000 - 29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====

AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink: 29.4500 - 29.5500 MHz SSB/CW
Beacons: 29.450 MHz
435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink: 145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB

Beacon 1: 29.352 MHz (intermittent)
Beacon 2: 29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
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SB SAT @ AMSAT W8ISS $WSR-063.S4
WSR 063 Part 4 03/04/2011

AMSAT NEWS SERVICE BULLETIN 063.S4
FROM AMSAT HQ SILVER SPRING, MD, March 04, 2011
TO ALL RADIO AMATEURS
BID: $WSR-063.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Re-entered
Re-entered: October 25, 2009

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[09062010]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35690

Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 437.325 MHz 9k6 GMSK
437.325 MHz CW 20wpm
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 436.250 MHz 9k6 FHSS
[11112009]
=====
Pollux
Catalog Number: 35693
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25
[09062010]
=====
Castor (ANDE-2)
Catalog Number: 35694
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25
[09062010]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Re-Entered
Re-entered date: August 8, 2010

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[08082010]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[01012009]

=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
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ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at} amsat.org
NNNN
/EX

31. Radio Meteor Obs. Bull. February 2011

Newsgroup: rec.radio.amateur.space
Date: 2011-03-05 19:27:49 UTC
From: Chris Steyaert <observations@rmob.org>
Message-ID: <il35n6lmnj1op72884o9qv8809i3e0bcmg@4ax.com>
Source record: 457
Cross-posted to: rec.radio.amateur.space,sci.astro.amateur

Radio Meteor Observation Bulletin No. 211 of February 2011 (86 K) is available now as

http://www.rmob.org/rmobtext/rmob1102.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

Chris

32. ANS-065 AMSAT News Service Weekly Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2011-03-06 02:22:46 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <000f01cbdba5$5cd94220$168bc660$@net>
Source record: 458
Cross-posted to: rec.radio.amateur.space,rec.radio.info

AMSAT NEWS SERVICE
ANS-065

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* AO-51 Configuration Plans Still Affected by Eclipses
* ARISSat-1 to be Activated Aboard ISS on April 12
* AMSAT Heading For Dayton Hamvention
* NASA Glory Satellite and Three CubeSats Lost Vandenberg Launch Failure
* Pakistan Developing Student CubeSat Projects
* Satellite Shorts From All Over
* NASA, Make Magazine Announce Competition to Fly Student Experiments

SB SAT @ AMSAT $ANS-065.01
AO-51 Configuration Plans Still Affected by Eclipses

AMSAT News Service Bulletin 065.01
>From AMSAT HQ SILVER SPRING, MD.
March 6, 2011
To All RADIO AMATEURS
BID: $ANS-065.01

AO-51 Command Station, Mark Hammond, N8MH reported that AO-51 is nearing the end of eclipse periods. Analysis of telemetery from the satellite shows that AO-51 is still not experiencing full sunlight, most likely due to spacecraft orientation and sun angle. On-board temperatures are climbing and the Command Team continues to monitor and tweak various power management parameters to take advantage of the solar power that is available.

Helpful reports from users (about the transmitters turning OFF) and telemetry confirm that AO-51 is still seeing a few minutes of "dark-ness" every orbit.

AO-51 was configured for "normal operational mode" on March 3, and will remain in this configuration until further notice. That includes the V/U repeater the Packet BBS with L-band uplink:

AO-51 Schedule as of March 3:

Mode V/U FM Voice Repeater (no PL tone needed)
Uplink: 145.920 MHz FM
Downlink 435.300 MHz FM

Mode L/U PacSat BBS
Uplink: 1268.703 MHz FSK 9k6 baud
Downlink 435.150 MHz FSK 9k6 baud

The Packet BBS will be open for use, but the Command Team asks for
your cooperation (by standing by and not entering the queue) if you
share the footprint with a command station (most often on the East
coast of the US). Should conditions improve, there will be an attempt
support some S-band operations--but for now that seems unlikely.

The latest AO-51 status and configuration news will be posted on the
amsat-bb and on the AO-51 Control Team News web page at:
http://www.amsat.org/amsat-new/echo/CTNews.php

[ANS thanks Mark Hammond, N8MH for the above information]

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SB SAT @ AMSAT $ANS-065.02
ARISSat-1 to be Activated Aboard ISS on April 12

AMSAT News Service Bulletin 065.02
>From AMSAT HQ SILVER SPRING, MD.
March 6, 2011
To All RADIO AMATEURS
BID: $ANS-065.02

The ARISSat-1 satellite, presently still inside the ISS, will be
turned on and use an external antenna on 12 April 2011 to celebrate
the 50th anniversary of Yuri Gagarin's first manned space flight.
AMSAT will support this event and issue certificates to those
stations reporting reception of the ARISSat-1 signals. Roscosmos
has announced that the satellite will be deployed into orbit during
the next EVA in July of this year.

Latest ARISSat-1 News
http://www.arissat1.org/v3/

Get your color ARISSat-1 Frequency Guide here.
http://tinyurl.com/4t497t2 (AMSAT web)

ARISSat-1 Presentation Slides (~1MB)
http://tinyurl.com/4n4pzkm (AMSAT web)

SouthGate streaming videos about the April 12 Yuri's Night plus
links to more resources can be found at:
http://tinyurl.com/49jnbg2 (SouthGate ARC)

[ANS thanks the ARISSat-1 Team for the above information]

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SB SAT @ AMSAT $ANS-065.03
AMSAT Heading For Dayton Hamvention

AMSAT News Service Bulletin 065.03
>From AMSAT HQ SILVER SPRING, MD.
March 6, 2011
To All RADIO AMATEURS
BID: $ANS-065.03

The 2011 Dayton Hamvention will be held this year May 20-22. This year featured AMSAT attractions include:

+ Operational ARISSat-1 Prototype
+ Astronaut Doug Wheelock, KF5BOC, will be attending as a special guest of the ARRL and AMSAT. Doug will visit the AMSAT booth on both Friday and Saturday.
+ AMSAT theme for 2011 is "Providing Education Through Amateur Satellites"

The latest AMSAT at Hamvention news will always be posted at:
http://www.amsat.org/amsat-new/hamvention/2011/Dayton.php

This is the 60th year of the Dayton Hamvention, sponsored by DARA (Dayton Amateur Radio Association). As has been the case for the many years the Hamvention will be at the Hara Arena Complex on the north side of Dayton. Further information on Hamvention 2011, including advance ticket sales and motel accommodations, can be found at http://www.hamvention.org.

AMSAT will occupy the same booths (444-449) in Ball Arena, right across from the ARRL area and just inside the door from the Satellite Demonstration area. Plan to visit all of the AMSAT activities!

AMSAT Activities at Dayton

AMSAT has planned a number of great activities during Hamvention. There will also be a number of new offerings at the AMSAT booth as well as Specials, follow the link for Booth Activities to see them.

The AMSAT theme for 2011 is "Providing Education Through Amateur Satellites". We will have multiple exhibits of the new AMSAT satellites on display.

ARISSat-1

ARISSat has been completed and is in orbit waiting for the July, 2011 EVA to deploy it into orbit. We will have on display an operational prototype. Tune your HT to 145.950 MHz to hear the FM beacon.

AMSAT Thursday Night Get-together

We will be at Tickets Pub & Eatery this year. The menu is great and a nice change of pace. Check it out at TicketsPub.com

AMSAT Forum

The AMSAT Forum will be on Saturday May 21.

AMSAT/TAPR Banquet

The fifth annual AMSAT/TAPR Banquet will be Friday night May 20 at
the Kohler Presidental Banquet Center. The speaker for the event has
not been finalized.

Seating is limited and reservations are required. Go to the Dayton
Banquet 2011 link:
http://www.amsat.org/amsat-new/hamvention/2011/Banquet.php to find
information about reservations and additional information.

AMSAT Hotel

AMSAT has only a few rooms left in the reserved block at the Country
Inn & Suites in Fairborn, OH. Please contact Martha at the AMSAT
office for room price and availability during Hamvention. Priority
for rooms will be given to those volunteering to work in the AMSAT
booth for multiple 2 hour shifts during Hamvention. The phone
number for the AMSAT office is 301-589-6062. Other hotels in the
immediate area of the Country inn & Suites include the Fairfield
Inn, Ramada Inn, Hampton Inn, Fairborn Holiday Inn, Red Roof Inn
and the Homewood Suites if additional accommodations are needed.

[ANS thanks Gould Smith, WA4SXM for the above information]

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SB SAT @ AMSAT $ANS-065.04
NASA Glory Satellite and Three CubeSats Lost Vandenberg Launch Failure

AMSAT News Service Bulletin 065.04
>From AMSAT HQ SILVER SPRING, MD.
March 6, 2011
To All RADIO AMATEURS
BID: $ANS-065.04

NASA announced on Friday that the March 4 launch from Vandenberg AFB
of a Taurus XL rocket carrying the Glory Satellite Mission and three
student cubesats from the University of Kentucky, University of Mon-
tana, and University of Colorado failed to reach orbit. Telemetry
indicated the fairing, the protective shell atop the Taurus XL rocket,
did not separate as expected about three minutes after launch.

+ Glory was a new NASA Earth-observing satellite intended to improve
our understanding of how the sun and tiny atmospheric particles
called aerosols affect Earth's climate.

+ KySat-1, University of Kentucky was designed to bring satellite
command, control, and communications into Kentucky classrooms
using mobile and portable stations.

+ Explorer-1 [Prime], University of Montana was designed to make space weather observations of the Van Allen Radiation Belts.

+ Hermes, University of Colorado was designed to test high speed communications from small satellites.

The NASA Press Release can be found on-line at:
http://www.nasa.gov/home/hqnews/2011/mar/HQ_11-050_N0_Glory.html

A news item of this launch failure is also available from the UniverseToday.com website at: http://tinyurl.com/5rf3b7g

See also:
http://tinyurl.com/63htzgr (National Journal with streaming video)
http://tinyurl.com/4uvne77 (Lompoc Record news coverage)
http://tinyurl.com/4ksdare (LA Times)
http://spaceflightnow.com/taurus/glory/110304gloryfail/
http://tinyurl.com/6fntsfw (SpaceFlightNow.com streaming video)
http://tinyurl.com/6c46mt5 (NASA Press conference on SpaceFlightNow)

[ANS thanks NASA and the news websites cited above for this information]

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SB SAT @ AMSAT $ANS-065.05
Pakistan Developing Student CubeSat Projects

AMSAT News Service Bulletin 065.05
>From AMSAT HQ SILVER SPRING, MD.
March 6, 2011
To All RADIO AMATEURS
BID: $ANS-065.05

Pakistan's Institute of Space Technology (IST) has initiated a space program aimed at designing, building, launching and succesfully operating a standard CubeSat.

The program is led by Communication Systems Engineering (CSE) Department with support from Aeronautics & Astronautics as well as Materials Department. As a Space technology institute and research center, one of the objectives of IST is to design and develop miniature satellites for technology evaluation and in-orbit demonstration and to provide students with hands-on experience in space technologies, to meet the work force requirement for the national space program. Institute of Space Technology is the first academic institution of Pakistan to initiate the small satellite development program.

New Pakistan Satellite ICube-1 Specifications include:

Beacon 436.8475 MHz, CW, 100mW
Downlink 437.490 MHz, FSK, AX.25, 1200bps, 600mW
Uplink 145.835 MHz, FSK, AX.25, 1200bps

Plans are for a launch in the 3rd quarter of 2011.

Full information can be found on ICube-1 web pages:
http://www.icube.org.pk/

Student Satellite Project
http://www.ist.edu.pk/student_satellite.html

Institute of Space Technology (IST)
http://www.ist.edu.pk/

[ANS thanks Pakistan IST and SouthGate ARC News Site for the
above information]

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SB SAT @ AMSAT $ANS-065.06
Satellite Shorts From All Over

AMSAT News Service Bulletin 065.06
>From AMSAT HQ SILVER SPRING, MD.
March 6, 2011
To All RADIO AMATEURS
BID: $ANS-065.06

+ Happy 27th birthday this past week to Oscar 11 which was launched on March 1, 1984. Clive, G3CWV noted in his UO-11 report that the satellite wasn't transmitting on its birthday but did resume its AFSK FM ASCII Telemetry on 145.826 MHz on March 3. The satellite is now transmitting during eclipses, although signals are weaker at those times. This indicates that there is still some capacity remaining in the battery. Excellent signals have been reported from stations located around the world, and good copy obtained from de-coded telemetry frames. More information can be found on-line at: http://www.g3cwv.co.uk/oscar11.htm.

+ Congratulations to Scott N6PG on his first satellite contacts last week via AO-51 with W7JPI, and ND9M/mm, and K0VK. Scott was using a VX-8R and an Elk antenna. Scott has posted a video of the contact at: http://www.youtube.com/watch?v=foCs_eoIL1A

+ The Southeastern VHF Society has issued their last call for the 2011 SVHFS Conference Papers which need to be received by March 11. Please send to N2CEI, Steve Kostro at:
SVHFS2011@downeastmicrowave.com.
They also have one or two more presentation slots open so if you would like to make one; published paper not required. Contact Steve with your presentation also. Deadline for hotel reservations is March 29. A link for hotel reservations can be found on the confer-ence page at: http://www.svhfs.org. 15th annual Southeastern VHF Society Conference to be held in Huntsville, Alabama on April 29th and 30th, 2011.

+ Alex OZ9AEC has produced three videos showing reception of weak 70cm Amateur Radio satellite signals using the AMSAT-UK FUNcube SDR Dongle. Alex used the FUNcube Dongle with a standard 8 ele

Wimo X-yagi, preamp and ~40 meters of coax down to the shack to receive these satellite signals in the 70cm satellite segment 435-438MHz. The beacons run about 100mw output. Watch at: http://tinyurl.com/6f7hdag (SouthGate)

+ UniverseToday.com has posted a gallery of STS-133 launch photos at: http://tinyurl.com/6gvbuqc Also at UniverseToday.com are high resolution, pan-able images of the Space Shuttle: http://tinyurl.com/4fma9x8
Rick, K7TEJ posted this link to a video of the STS-133 launch that was captured from a passing airliner: http://www.youtube.com/watch?v=GE_USPTmYXM

+ Bob, W7LRD plans to run a AMSAT information table at the Mike and Key Amateur Radio Club 30th Electronics Show and Fleamarket on Saturday, March 12, 2011 at Puyallup, Washington. Ticket Sales open at 8:00 AM; Doors open at 9:00 AM.

+ NASA has released a cool sound track of the sounds of thousands of cometary dust particles pelting Stardust-NExT as it flew past Comet Tempel at 9.8 km/sec, or 24,000 MPH. The audio was recorded by an instrument aboard the spacecraft called the Dust Flux Monitor which measures sound waves and electrical pulses from dust impacts. Listen at: http://tinyurl.com/5rorrou (UniverseToday.com)

[ANS thanks everyone for the above information]

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SB SAT @ AMSAT $ANS-065.07
NASA, Make Magazine Announce Competition to Fly Student Experiments

AMSAT News Service Bulletin 065.07
>From AMSAT HQ SILVER SPRING, MD.
March 6, 2011
To All RADIO AMATEURS
BID: $ANS-065.07

In a press release titled, "NASA Launches 2011 Nationwide Technology Space Competition for Education", NASA says it's Emerging Commercial Space Office (ECSO) is teaming with Make Magazine, and Teachers in Space to help develop spaceflight kits that high school teachers and students can build and fly on suborbital flights.

The NASA/Make competition is designed to inspire curiosity and create interest in science, technology, engineering and mathematics (STEM) among classroom teachers and their students. Contenders will be invited to submit ideas, concepts and prototypes for kits that teachers and students can build for future spaceflights.

Competition rules are simple. Kits should use components that are likely to be available at most high schools, and submitted experiments must be self-contained and fit in a standard Cubesat container.

To make kits accessible to students nationwide, part of the challenge is to be able to build these kits for under $100, the kind of funds that could be raised by a school bake sale.

The first experiment kits to be selected will fly aboard the Excelsior STEM mission, a commercial unmanned suborbital mission sponsored by Teachers in Space and scheduled to fly in 2011. Experiment kits for the Excelsior STEM mission will be assembled by teachers at a Suborb-ital Flight Experiment Workshop to be held August 1-5, 2011 at the NASA Dryden Flight Research Center's AERO Institute in Palmdale, Calif.

The full NASA Press Release can be found on-line at:
http://www.nasa.gov/centers/ames/news/releases/2011/11-14AR.html

Make Magazine says more details about the challenge, including rules, prizes, etc., will be coming soon. If you'd like to participate in the MAKE Space Challenge, get on the mailing list! They will notify you the details for challenge have been finalized and when the application process opens. You can sign up for the Space Challenge mailing list at: http://blog.makezine.com/space

[ANS thanks NASA and Make Magazine for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office. And, with that please keep in mind that you realize you are getting old when your body begins to make the same noises as your coffee maker.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

33. ANS-072 AMSAT News Service Weekly Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2011-03-16 13:33:21 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <000c01cbe3de$b2bbd450$18337cf0$@net>
Source record: 459
Cross-posted to: rec.radio.amateur.space,rec.radio.info

AMSAT NEWS SERVICE
ANS-072

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* AMSAT responds to HR 607 threat to 70-cm satellite operations
* GPredict Now Available for Windows
* OSCAR 11 Report 04 March 2011
* Middle School Students to Launch Near-Space Balloon
* ARISS Status - 7 March 2011

SB SAT @ AMSAT $ANS-072.01
AMSAT responds to HR 607 threat to 70-cm satellite operations

AMSAT News Service Bulletin 072.01
From AMSAT HQ SILVER SPRING, MD.
March 13, 2011
To All RADIO AMATEURS
BID: $ANS-072.01

Recently a bill, H.R. 607, the "Broadband for First Responders Act of 2011," was introduced by Rep. Peter King (R-NY). The bill addresses the creation and maintenance of a nationwide Public Safety broadband network.

This bill is unique in that it provides for the reallocation of the 420-440 MHz block of frequencies away from its current primary and secondary users. The inclusion of most of the amateur 70-cm spectrum, and the entire spectrum allocated for the Amateur Satellite Service, constitutes a major threat to satellite operations. Almost all current and planned amateur satellites include the use of 70-cm band. If the use of 70-cm is lost, there is no reasonable replacement.

The next available band, 23-cms, is restricted to uplinks, and is coming under increasing pressure from global navigation services. Likewise, 13-cms is rapidly becoming unusable due to terrestrial noise sources from consumer devices. The passage and implementation of this

bill will effectively end the ability to use relatively cheap, readily available amateur equipment for both amateur communications and university research programs.

More details can be found at WWW.ARRL.ORG as well as a sample letter which may be edited for your use. There is information on using the ARRL's legislative liaison to speed the delivery due to existing security restrictions on direct mail. An AMSAT sample letter, stressing the interests of amateur satellite users, is available at WWW.AMSAT.ORG.

[ANS thanks Alan, WA4SCA, for the above information]

/EX

SB SAT @ AMSAT $ANS-072.02
GPredict Now Available for Windows

AMSAT News Service Bulletin 072.02
From AMSAT HQ SILVER SPRING, MD.
March 13, 2011
To All RADIO AMATEURS
BID: $ANS-072.02

Alexandru has just made Gpredict 1.3 available free for all you Windows operators at

https://sourceforge.net/projects/gpredict/files/Gpredict/1.3/

Of course, it's also available for Mac and Linux users.

[ANS Nigel, W8IFF, for the above information]

/EX

SB SAT @ AMSAT $ANS-051.03
OSCAR 11 Report 04 March 2011

AMSAT News Service Bulletin 051.03
From AMSAT HQ SILVER SPRING, MD.
February 20, 2011
To All RADIO AMATEURS
BID: $ANS-051.03

OSCAR-11 celebrated it's 27th birthday on 01 March! It was designed, built and launched within a period of six months, using commercially available 'off the shelf' components (COTS). Once again, congratulations to Professor Sir Martin Sweeting G3YJO, his team at the University of Surrey and groups of radio amateurs who also contributed to the project. Unfortunately, the satellite wasn't transmitting on its birthday, but resumed transmissions, three days later.

This report covers the period from 31 January to 04 March 2011. During this time the satellite has been heard from 10 to 21 February and from 03 March 2011. It is expected to switch-off

again 13 March until 23 March.

Excellent signals have been reported from stations located around the world, and good copy obtained from decoded telemetry frames.

The satellite is now transmitting during eclipses, although signals are weaker at those times. This indicates that there is still some capacity remaining in the battery.

The on-board clock is now very stable.

The VHF beacon frequency is 145.826 MHz. AFSK FM ASCII Telemetry

At the present time, while OSCAR-11 is operating in a predictable way, I no longer need direct reports or files by e-mail. However, could all listeners continue to enter their reports on the general satellite status website. This is a very convenient and easy to use facility, which shows the current status of all the amateur satellites, and is of use to everyone. Reports around the expected times of switch-on and switch-off are of special interest, especially for times 12:00 - 17:00 and 22:00 - 07:00 UTC, to when the satellite is out-of-range in the UK . The URL is http://oscar.dcarr.org/index.php

A longer version of this report is available on my website, and new listeners to OSCAR-11 should read this for further information. The URL is www.g3cwv.co.uk/oscar11.htm . This page contains a links to the longer report, a short audio clip to help you identify the satellite and a file of the last telemetry received. The website also contains an archive of news & telemetry data which is updated from time to time, and details about using a sound card or hardware demodulators for data capture. There is also software for capturing data, and decoding ASCII telemetry.

If you place this bulletin on a terrestrial packet network, please use the bulletin identifier $BID:U2RPT154.CWV, to prevent duplication.

73 Clive G3CWV xxxxx@amsat.org (please replace the x's by g3cwv)

[ANS thanks Clive, G3CWV, for the above information]

/EX

SB SAT @ AMSAT $ANS-051.04
Middle School Students to Launch Near-Space Balloon

AMSAT News Service Bulletin 051.04
From AMSAT HQ SILVER SPRING, MD.
February 20, 2011
To All RADIO AMATEURS
BID: $ANS-051.04

A group of students from Olde Towne Middle School (OTMS) in Ridgeland, Mississippi is preparing for a trip to space -- or as close as they can get. The OTMS Radio and Technology Club, along with the school's Science Team, are planning a near-space balloon launch at 9 AM (CDT) on March 26 (the date and time are subject to change depending on weather). The balloon -- nicknamed Titans in Space -- will use the call sign KC5NXD and is expected to reach an altitude of 94,825 feet.

The project is led by Bill Richardson, N5VEI, a past participant in the ARRL Teachers Institute on Wireless Technology, a professional development program that is part of ARRL's donor-funded Education & Technology Program. The school has also received several grants of Amateur Radio station equipment from this program. Richardson is the sponsor of the school's Radio and Technology Club.

The balloon will be equipped with instruments to track its exact location and a camera that will take snapshots every 15 seconds. The students will stay on the ground and analyze the data as it is transmitted back to them from the balloon. "As far as I can research, we are the first elementary, middle or high school to launch a near-space balloon in our state," Richardson told the ARRL. The balloon will launch from the Madison County Career and Technology Center in Gluckstadt. Preflight will begin at 90 minutes before the scheduled launch. The preflight and launch will be stream-cast live on the Internet at, http://www.ustream.tv/user/kc5nxd. You can also follow along on Twitter.

"Our students are busy with assembly and payload testing right now, preparing for launch day," said OTMS Principal Allen Lawrence. "This is really a great science experiment and they are all excited."

Richardson is encouraging radio amateurs to follow the balloon via APRS on 144.39 MHz, on http://aprs.fi with the call sign kc5nxd-11 and via a 2 meter voice beacon on 146.565 MHz. A 20 meter beacon at 14.079-14.080.5 MHz will offer telemetry in four modes: Domino-ex16, CW, RTTY and Hellschreiber.

According to Richardson, the group will be using a special balloon-modified version of FLdigi, called dl-FLdigi. Ground stations receive the balloon's telemetry via the program's soundcard decoding software (available as a free download from http://www.w1hkj.com). "In essence, you are creating your own HF or VHF APRS-style network on the fly," he explained. "When a valid frame is received by a ground station, it is then sent via dl-FLdigi to a server that then plots the position onto a website dedicated to high altitude ballooning." The website can be found at, http://spacenear.us/tracker.

Richardson said that the students need help to grab data packets or use the FLdigi to relay to packets to the network: "With the new telemetry system, we will have a better data set for a final landing

spot, as well as research data."

The launch is in partnership with the Mississippi State University's Bagley College of Engineering's aeronautical engineering program, which has provided support and supplies to the students' efforts. The project has already received national attention from The Sally Ride Foundation, named after the first American woman to fly in space. The foundation -- dedicated to supporting girls' and boys' interests in science, math and technology -- sent the students a letter of support and congratulations in advance of the launch. All funding for the project has come from donations and fund raisers. The project has received support from the local community, including the Jackson (Mississippi) Amateur Radio Club.

[ANS thanks ARRL for the above information]

/EX

SB SAT @ AMSAT $ANS-072.05
ARISS Status - 7 March 2011

AMSAT News Service Bulletin 072.05
From AMSAT HQ SILVER SPRING, MD.
March 13, 2011
To All RADIO AMATEURS
BID: $ANS-072.05

1. Recent ARISS Contacts

On Wednesday, March 2 an ARISS contact was held between on-orbit astronaut Paolo Nespoli, IZ�JPA and Mackay State High School students in Queensland, Australia via telebridge station VK5ZAI, Australia. All 16 questions were answered. One of the approximately 200 people in attendance was the mayor of Mackay who asked the ARISS team to "keep up the good work - you are doing a great job inspiring our students." He expressed his amazement on how well timed and extremely enjoyable the contact was. Three television stations covered the radio hookup and snippets of the event were broadcast on at least 2 regional TV channels all afternoon following the contact. The Mackay Daily Mercury wrote a story on the event:
http://www.dailymercury.com.au/story/2011/03/03/historic-link-to-space-mackay-high-school/

Technological Centre for Innovation in Communications (CeTIC) in Las Palmas de Gran Canaria, Spain experienced a successful ARISS contact on Thursday, March 3. Astronaut Paolo Nespoli, IZ�JPA answered all 20 questions posed to him by the students. The contact supplemented lessons on orbit prediction, satellite tracking and common communications systems.

Victory Primary School in Nelson, New Zealand participated in an ARISS contact on Thursday, March 3 via telebridge station W6SRJ in California.

Cady Coleman,KC5ZTH answered 17 questions prepared by the students. One additional query was answered with the help of shuttle crew member Alvin Drew. The contact was the culmination of a science curriculum focused on space and technology.

2. NASA Posts Article on Ten Years of ARISS Contacts

NASA posted a feature story on the 10th anniversary of ARISS contacts to its Web site. "One Small Radio Call for a Ham" may be found on the following page:
http://www.nasa.gov/audience/foreducators/one-small-radio-call.html

3. Astronaut Training Status

A few exam review sessions were provided for Chris Cassidy this past week. Astronauts Andre Kuipers, PI9ISS and Don Pettit, KD5MDT participated in simulated ARISS contacts with students in Belgium and Canada, respectively on March 3.

An ARISS introductory course is planned for Mike Hopkins on March 9 and a refresher course for Chris Hadfield is scheduled for March 10.

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

34. ANS-079 AMSAT News Service Weekly Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2011-03-20 14:29:31 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <000f01cbe70b$35f4e710$a1deb530$@net>
Source record: 460
Cross-posted to: rec.radio.amateur.space,rec.radio.info

AMSAT NEWS SERVICE
ANS-079

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* ARISS Contact-Fair Lawn, NJ
* BJ8TA Amateur Radio EME & Satellites Expedition
* 2M1EUB/P Satellite Operation Begins from Scotland
* AMSAT India March Newsletter Available for Download
* ARISS Status - 14 March 2011
* Fastrack Satellites Separated
* AO-51 in eclipse
* UK Space Agency UKube-1 Cubesat Takes Shape
* ISS Reboost March 18th

SB SAT @ AMSAT $ANS-079.01
ARISS Contact-Fair Lawn, NJ

AMSAT News Service Bulletin 079.01
From AMSAT HQ SILVER SPRING, MD.
March 20, 2011
To All RADIO AMATEURS
BID: $ANS-079.01

This past Monday, March 14, 2011, The Fair Lawn ARC conducted a successful ARISS Contact. It was the fruition of a few years of applications, paperwork and sweat equity. After initial instructions giving specific details, the last weekend a complete change of Astronaut and frequency of OPS was dictated. The operating group quickly made necessary changes.

The school system involved was thrilled after hearing Paulo Nespoli, IZ0JPA, calling back from NA1SS after our student Zack, KC2RSS, gave the initial calls. Everyone breathed a sigh of relief after that. All questions were answered by a gracious Paulo on the ISS and applause was given after the contact by the 200 plus people that attended the

contact. Everyone involved felt a great deal of pride and accomplishment. ARISS has made it a smooth ride for all that decides to get involved and show local school officials what is involved and the scientific aspects of making such a contact. Newspaper coverage can be found on-line at:
http://www.northjersey.com/news/031411_Fair_Lawn_students_talk_to_orbiting_astronaut.html

[ANS thanks Dee, NB2F, for the above information]

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SB SAT @ AMSAT $ANS-079.02
BJ8TA Amateur Radio EME & Satellites Expedition

AMSAT News Service Bulletin 079.02
From AMSAT HQ SILVER SPRING, MD.
March 20, 2011
To All RADIO AMATEURS
BID: $ANS-079.02

AMSAT-China Chief Executive Officer Alan Kung, BA1DU reports that AMSAT-China is organizing an expedition to southwest China for EME experiments and amateur satellite communications. The expedition team will use special technology experiments amateur radio call sign BJ8TA.

BJ8TA team will be active on the available satellites, including AO-51, VO-52, AO-7, AO-27, FO-29, SO-50, SO-67 etc, during the expedition period.

Initially the team will operate from Shangri-La County(NL97ut), Yunnan Province of China during March 20-23. This will mark the first time amateur radio EME communications in grid NL, the communications scheme on the 6m, 2m and 70cm bands, using Yagi antennas with PA of one kilowatt.

And then, the team will move to Yunnan Astronomical Observatory of the Chinese Academy of Sciences in Chengjiang county, it is located in grid OL14kq. The EME communications will use the 11 meter diameter radio telescope antenna with gain of 29dbi on the 70cm band. These operations will be from March 28 to April 1.

BJ8TA Amateur Radio EME & Satellites Expedition is supported by the Bureau of Radio Regulation of China and Yunnan Astronomical Observatory of the Chinese Academy of Sciences.

BJ8TA team members:

VIP operators:
Xie Feibo, BA1XIE, Director General of the Bureau of Radio Regulation of China.
Yin Hu, BD1AZ, Land Service Department of the Bureau of Radio Regulation of China.

Chen Ping, BA1HAM, Deputy Secretary General of the Amateur Radio
Committee of Chinese Radio Association.
Li Jian, Land Service Department of the Bureau of Radio Regulation
of China.

Team leader: Fan, BA1EO
Operators: Alan, BA1DU; Wang, BA4RN; Wang, BH4REQ; Zhao, BH4RLO; Jin,
BA4TA; Michael, BD5RV;and Chen, BA7CK
Logistics: Zhu, BG5FCB; Zhang, BG8SF
QSL manager: Alan, BA1DU (P.O.Box 8091, Beijing 100088, CHINA).

[ANS thanks Alan Kung, BA1DU for the above information]

/EX

SB SAT @ AMSAT $ANS-079.03
2M1EUB/P Satellite Operation Begins from Scotland

AMSAT News Service Bulletin 079.03
From AMSAT HQ SILVER SPRING, MD.
March 20, 2011
To All RADIO AMATEURS
BID: $ANS-079.03

Paul, 2E1EUB says he will begin portable satellite operation from
Scotland as 2M1EUB/P beginning on March 20 and continuing for one
week.

Paul has spent the winter preparing his van for operating which he
plans to drive up into the mountains weather permitting.

Paul's information for both callsigns can be found at
http://www.qrz.com.

[ANS thanks Paul, 2E1EUB for the above information]

/EX

SB SAT @ AMSAT $ANS-079.04
AMSAT India March Newsletter Available for Download

AMSAT News Service Bulletin 079.04
From AMSAT HQ SILVER SPRING, MD.
March 20, 2011
To All RADIO AMATEURS
BID: $ANS-079.04

AMSAT INDIA Secretary Nitin, VU3TYG announced this week that AMSAT
INDIA's March 2011 Newsletter is available for download at:
http://amsatindia.org/Newsletter/AMSATINDIA-News-March_2011.pdf

Content of the March Newsletter include:
1. Update on the Technical talk held on February 20th 2011
2. Update on the Cubesat Transponder project by AMSAT INDIA.
3. Report by Anantha - VU3GPF on the scheduled contact with ISS

with his school in India.
4. VU4PB - DXpedition by Amateur Radio Society of India (ARSI)
to Andaman and Nicobar.
5. News from AMSAT Organizations worldwide.

Archives of previous newsletters are also available on-line at:
http://www.amsatindia.org/Newsletter.

[ANS thanks Nitin, VU3TYG for the above information]

/EX

SB SAT @ AMSAT $ANS-079.05
ARISS Status - 14 March 2011

AMSAT News Service Bulletin 079.05
From AMSAT HQ SILVER SPRING, MD.
March 20, 2011
To All RADIO AMATEURS
BID: $ANS-079.05

Amateur Radio on the International Space Station (ARISS) Status Report
March 14, 2011

1. School Contacts

The March 14Fair Lawn High School, Fair Lawn, New Jersey contact was
a great success and the contact on Monday was rebroadcast on Echo
Link. The contact was integrated into the curriculum covering space
and earth science as well as human anatomy and physiology. The link
to local newspaper coverage is:
http://www.northjersey.com/news/031411_Fair_Lawn_students_talk_to_
orbiting_astronaut.html

There were over 200 people in attendance to hear Paulo Nespoli gra-
ciously answered the questions of the various age students from 2nd,
5th & High School levels. The Fair Lawn ARC was involved along with
local AMSAT Volunteers to assure the contact went smoothly and without
any last minute Murphy adventures.

Students from five schools in Plock and Liszyno, Poland jointly par-
ticipated in an Amateur Radio on the International Space Station (ARISS)

contact on Thursday, March 17 at 09:21 UTC. Through this activity and
related studies, students will learn about space and space exploration,
communication and technology. The Scout Amateur Radio Club SP5ZBA will
handle the radio connection for the contact.

An ARISS contact has been accomplished for Luitpold-Gymnasium Muenchen,
Munich, Bavaria, Germany on Thursday, March 17 at 14:05 UTC. Prepara-
tions for their contact, seventeen year olds took the course "Space-
flight" were joined by children from lower grades to learn about aero-
nautics and scientific work. The ESA ISS Education Kit was used in their

studies and the German amateur radio organization (DARC) gave the youth a comprehensive introduction to amateur radio on the ISS.

ISIP Cossar/Da Vinci, Gorizia, Italy was realized for an Amateur Radio on the International Space Station (ARISS) contact on Saturday, March 19

at 08:38 UTC. The radio contact, the telecommunication equipment installed and used in the school as well as the collaboration with a local group of amateur radio operators will offer telecommunications students the chance to test instruments able to connect to listening posts 300 km

away.

2. Recent ARISS Contacts

On Tuesday, March 8, youth from ICS "Marco D'oggiono", Oggiono, Italy spoke with Paolo Nespoli, IZ0JPA via an Amateur Radio on the International
Space Station (ARISS) contact. The astronaut fielded 13 questions before

the ISS went over the horizon. Students wanted to know for example, what

one needs to do to become an astronaut and what type of research is performed on the ISS. The contact was the featured event of lessons emphasizing astronautics, astronomy, radio techniques and English. Nearly 400 students and teachers and about 100 visitors were present for the contact.
Regional television, local media and newspapers covered the event.

An ARISS contact took place between youth attending Schulhaus Dorf in Richterswil, Switzerland and on-orbit astronaut Cady Coleman, KC5ZTH on Tuesday, March 8. Coleman answered the 22 questions prepared for her with time left to exchange greetings. The contact was the culmination of science lessons on space and gave the students the opportunity to practice their English.

Students from "Francesco d'Assisi" Middle School and "Don Lorenzo Milani"
Primary School in Modugno, Bari, Italy, experienced an Amateur Radio on the International Space Station (ARISS) contact on Saturday, March 12. The event was held at "Cittadella Mediterranea della Scienza" in Bari where an audience of approximately 150 students, teachers, visitors and media were assembled.

Astronaut Paolo Nespoli, IZ0JPA on the ISS spoke with the youth over 2 consecutive passes, answering 30 questions about what it is like to live

in space. He answered a final question concerning the earthquake in Japan
and expressed his concern for the Japanese. Regional television, local media and newspapers covered the event.

On Saturday, March 12, Shri Krishna Vithyaalayam Matric School in Pollachi, India participated in an Amateur Radio on the International Space Station (ARISS) contact with ISS astronaut Cady Coleman, KC5ZTH via telebridge station IK1SLD in Italy. Twelve questions were asked and answered. The contact was integrated into science lessons about astronomy,
satellites and the ISS and included radio classes taught by the Anamalai

Amateur Radio Club located at the school.

3. Astronaut Training Status

Astronauts Luca Parmitano (Expedition 36) and Chris Cassidy (Expedition 35) both passed their amateur radio license exams on March 8. Their call

signs should be issued within a week.

On March 9, Michael Hopkins completed his ARISS introductory course and is currently preparing for his amateur radio license exam. Hopkins is slated to fly with Expedition 37 in September 2013.

An ARISS refresher course was provided to Chris Hadfield, KC5RNJ/VA3OOG on March 11. Hadfield is currently scheduled for Expedition 34, November

2012.

4. ARRL QST Covers ARISS Activities

The American Radio Relay League (ARRL) printed a few ARISS items in its April issue of QST, which has a circulation of 156,000. Under its "Media Hits" column was a piece about ARISS and the newspaper articles and TV news stories about Adobe Bluffs Elementary School's ARISS contact

and about Foster Heights Elementary/Nelson County Area Technical Center in Kentucky. The "Inside HQ" column, a column giving ARRL 2010 highlights, had a paragraph on education programs including the 48 ARISS QSOs of 2010 (not NASA's fiscal year 2010), and ARISS's 10th anniversary.

[ANS thanks Carol, KB3LKI, for the above information]

/EX

SB SAT @ AMSAT $ANS-079.06
FASTRAC Satellites Separated

AMSAT News Service Bulletin 079.06
From AMSAT HQ SILVER SPRING, MD.
March 20, 2011
To All RADIO AMATEURS
BID: $ANS-079.06

FASTRAC Satellites Separated

FASTRAC Student Program Manager Sebastian Munoz, KE5FKV, wrote,
"First of all I wanted to thank the HAM community all over the

world for supporting our project, your support has been incredible that we really value."

On March 15, after a few months of initial operations, FASTRAC started one of the most exciting phases of the project by separating both satellites so they can compute on-orbit real-time relative navigation solutions while both of them are freely drifting from one another.

The two Amateur Radio FASTRAC AX.25 satellites are:
FASTRAC-1 Sara Lily 437.345 MHz FM
FASTRAC-2 Emma 145.825 MHz FM

A FASTRAC Beacon decoder program is available on-line at:
http://www.dk3wn.info/software.shtml

[ANS thanks FASTRAC Student Program Manager Sebastian Munoz, KE5FKV for the above information]

/EX

SB SAT @ AMSAT $ANS-079.07
AO-51 in Eclipse

AMSAT News Service Bulletin 079.07
From AMSAT HQ SILVER SPRING, MD.
March 20, 2011
To All RADIO AMATEURS
BID: $ANS-079.07

AO-51 Enters Eclipse Periods Again

AO-51 Command Station, Mark Hammond, N8MH said this week, "Eclipses are back for AO-51, and the length is increasing every day. Eclipses are now lasting about 1-2 mins per pass, and it goes up pretty fast, gaining a minute every day or two. They will become rather long in the coming weeks/months (as long as 20 mins or more as I recall)."

DK3WN's Illum program illustrates what is ahead for AO-51 operations. This free download is available at:
http://www.dk3wn.info/software.shtml

AO-51 is still running under power management in single transmitter Mode on the 435.300 MHz downlink running approximately 1.3 watts. The satellite will be OFF during eclipses (and probably right before, and soon after). You'll probably still hear the transmitter cycling OFF and ON around eclipse times. But most voice users will appreciate the stronger signals.

AO-51 be in this mode until further notice.

Keep up with the latest AO-51 Control Team News on-line at:
http://www.amsat.org/amsat-new/echo/CTNews.php

[ANS thanks Mark Hammond, N8MH for the above information]

/EX

SB SAT @ AMSAT $ANS-079.08
UK Space Agency UKube-1 Cubesat Takes Shape

AMSAT News Service Bulletin 079.08
From AMSAT HQ SILVER SPRING, MD.
March 20, 2011
To All RADIO AMATEURS
BID: $ANS-079.08

UK Space Agency UKube-1 Cubesat Takes Shape

This week the UK Space Agency revealed the instruments and experiments that will be launched into orbit onboard the UKube-1 CubeSat in early 2012.

UKube-1 - a nanosatellite that will allow the UK to test new technologies and carry out new space research quickly and efficiently is an exciting and novel collaboration between the UK Space Agency, industry and academia, and is envisaged as the pilot for a full national CubeSat programme.

As well as providing a fantastic opportunity for innovative UK companies and UK academics to collaborate on a national space project, UKube-1 is also useful for training the next generation of space engineers.

A radio subsystem provided by AMSAT-UK, derived from the FUNcube program will provide a downlink for science education, and a mater- ials science experiment from which school students can receive data.
The system, funded by volunteer members and friends of AMSAT-UK, will be integrated with UKube-1 as part of the program.

The winning payloads from the UK Space Agency's payload competition include:

+ The first GPS device aimed at measuring plasmaspheric space weather.

+ A camera that will take images of the Earth and test the effect of radiation on space hardware, using a new generation of imaging sensor.

+ An experiment to demonstrate the feasibility of using cosmic radiation to improve the security of communications satellites and to flight test lower cost electronic systems.

+ A payload made up of 5 experiments that UK students and the public can interact with.

A complete list of the experiments is listed on the UKube-1 web page at: http://tinyurl.com/5v8g2a4 (bis.gov.uk/ukspaceagency)

The FUNcube subsystem which will be included on UKube-1, will have exactly the same functionality as the "original" FUNcube cubesat - including a U/V linear transponder. Full details of the whole FUNcube

project can be found here http://funcube.org.uk/

[ANS thanks AMSAT-UK and the UK Space Agency for the above information]

/EX

SB SAT @ AMSAT $ANS-079.09
ISS Reboost on March 18 Changes AOS at Your QTH

AMSAT News Service Bulletin 079.09
From AMSAT HQ SILVER SPRING, MD.
March 20, 2011
To All RADIO AMATEURS
BID: $ANS-079.09

ISS Reboost on March 18 Changes AOS at Your QTH

Roscosmos, the Russian Federal Space Agency has announced the ISS was reboosted 3.7 km on Friday, March 18. The readjustment is necessary to ensure the best conditions to dock Russia's Soyuz TMA-21 piloted spacecraft and the U.S. Endeavor space shuttle. Russia's Soyuz TMA-21 is expected to travel to the ISS sometime in early April, while the U.S. Endeavor will blast off from Cape Canaveral on April 19.

According to the Roscosmos press release the maneuver was conducted using the two main engines on board the European Space Agency's Automated Transfer Vehicle (ATV-2), named after Johannes Kepler.

Since the orbital period changes _roughly_ 1.2 seconds for each 1 km of altitude, observers on the ground should see almost 5 seconds of change. The usual caveats about tracking program ISS discrepancies should be kept in mind until the Keplerian Elements catch up.

The Roscosmos press release can be found on-line at:
http://www.federalspace.ru/main.php?id=41&lang=

[ANS thanks Roscosmos and information provided by Alan, WA4SCA via the sarex@amsat.org list for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Dee Interdonato, NB2F

35. WSR-080 AMSAT Weekly Satellite Report

Newsgroup: rec.radio.amateur.space
Date: 2011-03-22 16:08:47 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <002501cbe8ab$5f9a9910$1ecfcb30$@net>
Source record: 461
Cross-posted to: rec.radio.amateur.space,rec.radio.info

```
This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-080.S1
WSR 080 Part 1 03/21/2011

AMSAT NEWS SERVICE BULLETIN 080.S1
FROM AMSAT HQ SILVER SPRING, MD, March 21, 2011
TO ALL RADIO AMATEURS
BID: $WSR-080.S1

HO-68 HOPE-1 (CAS-1)(XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009 0231z
Launch site: Taiyuan Space Center, PRC

Status: By schedule

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
145.9250 - 145.9750 MHz SSB/CW
145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
435.7650 - 435.7150 MHz SSB/CW
435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[02092011]
=====
SO-67 SumbandilaSat
```

Catalog Number: 35870
Launch Date: September 17, 2009 1555z
Launch site: Baikonur, Kazakhstan

Status: By schedule

Callsign: ZS0SUM

Uplink: 145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/
[02092011]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[02092011]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05, 2005 0444z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.9360 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[02092011]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004 0745z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode(s):
Voice repeater: V/u
Uplink: 145.920 MHz FM
Downlink: 435.300 MHz FM

Telemetry: By Command ONLY
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.880 MHz FM
145.920 MHz FM
145.920 MHz FM - 67 Hz PL tone burst
1268.705 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.703 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[03212011]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002 1700z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4
Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the re-
peater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
the 10 minute timer.
[02092011]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993 0140z
Launch site: Kourou, French Guiana

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[02092011]
=====
AO-7 AMSAT OSCAR 7

Catalog number: 07530
Launch Date: November 15, 1974
Launch site: Vandenberg AFB, California, USA

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
145.972 MHz CW
435.100 MHz CW
2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02092011]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
Kourou, French Guiana
Uchinoura Space Center, Japan
Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - OFF
APRS - OFF
SSTV - OFF

Expedition 27 Crew:
Commander: Dmitry Kondratyev
Flight Engineer: Catherine Coleman KC5ZTH
Flight Engineer: Paolo Nespoli IZ0JPA

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM

Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[03212011]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-080.S2
WSR 080 Part 2 03/21/2011

AMSAT NEWS SERVICE BULLETIN 080.S2
FROM AMSAT HQ SILVER SPRING, MD, March 21, 2011
TO ALL RADIO AMATEURS
BID: $WSR-080.S2

O/OREOS
Catalog Number: 37224
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.035 MHZ AX.25

Beacon:

Callsign:

URL: http://www.ooreos.org/
[02092011]
=====
Rax-1 Radio Aurora Explorer
Catalog Number: 37223
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.505 MHz 9k6 GMSK

Beacon:

Callsign: RAX-1

URL: http://rax.engin.umich.edu/
[02092011]
=====
Fastrac-1 Sara Lily
Catalog Number: 37225
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On orbit

Uplink 1: 145.980 MHz 1k2 baud
Uplink 2: 145.825 MHz 1k2 baud
Downlink: 437.345 MHz 1k2 and 8k6 baud

Beacon: 437.435 MHz 1k2 AX.25

Callsign: Fast1

URL: http://fastrac.ae.utexas.edu/index.php
[02092011]
=====
Fastrac-2 Emma
Catalog Number: 37227
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink 1: 435.025 MHz 1k2 baud
Uplink 2: 437.435 MHz 9k6 baud
Downlink: 145.825 MHz

Beacon: 145.825 MHz 1k2 AX.25

Callsign: Fast2

URL: http://fastrac.ae.utexas.edu/index.php
[02092011]
=====
StudSat
Catalog Number: 36796
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink: 437.505MHz, 9600bps FSK
Downlink: 437.505MHz, 9600bps FSK
Beacon : 437.505MHz, 20bps ASK
[02092011]
=====
TIsat-1
Catalog Number: 36799
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On orbit

Callsign: HB9DE

Uplink: 145.980MHz FM, AFSK
Downlink: 437.305MHz FM, AFSK
Beacon: 437.305MHz CW
[02092011]
=====
HO-68 HOPE-1 (CAS-1)(XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009 0231z
Launch site: Taiyuan Space Center, PRC

Status: By schedule

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
145.9250 - 145.9750 MHz SSB/CW
145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
435.7650 - 435.7150 MHz SSB/CW
435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://www.camsat.cn
[02092011]

=====
SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w): 437.5050MHz FSK 1k2bps
[02092011]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
437.3850 MHz FSK 9k6bps
[02092011]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps
[02092011]
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
Beacon(500mw): 436.000MHz GMSK 9k6bps
[02092011]
=====
CP-6
Catalog Number: 35003
Launch Date: May 19, 2009 2355z

Launch site: Wallops Island, Virginia, USA

Status: Operational

Downlink: 437.365 MHz 1k2 AFSK
[02092011]
=====
HAWKSAT 1
Catalog number: 35004
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: operational

Downlink: 437.345 MHz ?
[02092011]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: Operational

Downlink: 437.465 MHz 1k2 AFSK
[02092011]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009 0115z
Launch Site: Satish Dhawan Space Centre, India

Status: ?

Downlink: 435.000 MHz
Uplink: 145.800 MHz

Telemetry: 137.400 MHz
[02092011]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon: 437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[02092011]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: In Orbit

Downlink: 437.375 MHZ FSK9k6/CW
Beacon: 437.375 MHz FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[02092011]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
437.465 MHz FM/CW
Beacons: 437.305 MHz FM/CW
437.275 MHz FM/CW

Callsigns: JR5YBN
JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[02092011]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Downlink: 437.455 MHz AFSK/CW
Beacon: 437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[20092011]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon: 437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[02092011]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008 1520z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Curent Modes: Telemetry
Audio
Images

Downlinks: 435.315 MHz
435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02092011]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web
page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[02092011]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[02092011]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Digipeater

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL
=/satellites/status.php
[02092011]
=====
Compass-1

Catalog number: 32787
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Current Mode: 4k8 MSK packet

Uplink: 145.980 MHz FM
Downlink: 437.275 Mhz CW
437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[02092011]
=====
CO-66 Seeds II
Catalog number:
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web
page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL
=/satellites/status.php
[02092011]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[02092011]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[02092011]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005 0652z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[02092011]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: ?????

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[02092011]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004 0745z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode(s):
Voice repeater: V/u
Uplink: 145.920 MHz FM
Downlink: 435.300 MHz FM

Telemetry:
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.880 MHz FM
145.920 MHz FM
145.920 MHz FM - 67 Hz PL tone burst
1268.700 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.708 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[032192011]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[02252011]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Current Mode: CW downlink worldwide
AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php
[02092011]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001 0240z
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[02092011]
=====
RS-22 RADIO SPORT 22 (MOZHAYETS 4)
Catalog number: 27939
Launch Date: September 27, 2003 0612z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02092011]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990
Launch site: Kourou, French Guiana

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
145.860 MHz 1200-baud Manchester FSK
145.880 MHz 1200-baud Manchester FSK
145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[02092011]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984
Launch site: Vandenburg AFB, California, USA

Status: Operational

Current Mode: /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz

Mode-S Beacon: 2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[02092011]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
Kourou, French Guiana
Uchinoura Space Center, Japan
Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - OFF
APRS - OFF
SSTV - OFF

Expedition 27 Crew:
Commander: Dmitry Kondratyev
Flight Engineer: Catherine Coleman KC5ZTH
Flight Engineer: Paolo Nespoli IZ0JPA

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear

U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[03212011]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-080.S3
WSR 080 Part 3 03/21/2011

AMSAT NEWS SERVICE BULLETIN 080.S3
FROM AMSAT HQ SILVER SPRING, MD, March 21, 2011
TO ALL RADIO AMATEURS
BID: $WSR-080.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NANOSAIL-D
Catalog Number:
Ejection Date: January 17, 2011

Status: On orbit

Downlink: 437.270 MHz AX.25

URL: http://nanosaild.engr.scu.edu/dashboard.htm
[01272011]
=====
CP4
Catalog Number: 31132
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[09062010]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[09062010]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[09062010]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.250

Official Website: http://www.ncube.no
[09062010]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink 2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[09062010]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[09062010]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====

MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks: 145.850 MHz
145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545

Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks

V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON General Beacon(GB) Middle Beacon(MB) Engineering Beacon(EB)
2 m none 145.898 MHz none
70cm 435.438 MHz 435.588 MHz 435.838 MHz
13cm(1) 2400.188 MHz 2400.338 MHz 2400.588 MHz
13cm(2) 2401.173 MHz 2401.323 MHz 2401.573 MHz
3cm 10450.975 MHz 10451.125 MHz 10451.375 MHz
1.5cm 24047.885 MHz 24048.035 MHz 24048.285 MHz
[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK

[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
145.890 FM
145.930 FM
1269.700 FM
1269.800 FM
1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[07172010]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink: 435.1380 MHz AFSK 1200 BPS
Downlink: 435.2060 MHz AFSK 1200 BPS
Uplink: 145.8150 MHz AFSK 1200 BPS
Uplink: 145.8350 MHz AFSK 1200 BPS
Uplink: 145.8550 MHz AFSK 1200 BPS
Uplink: 145.8750 MHz AFSK 1200 BPS
[06042009]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Non-operational
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
145.870 MHz FM
145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[11062010]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks: 145.875 MHz FM 1200-baud
145.900 MHz FM 1200-baud
145.925 MHz FM 1200-baud
145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink: 435.0625 MHz FM 1k2bps AFSK
435.1125 MHz FM 1k2bps AFSK
435.1375 MHz FM 1k2bps AFSK

Downlink: 145.9750 MHz FM 1k2bps AFSK
2446.5025 MHz FM 1k2bps AFSK

Beacon: 2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink: 435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons: 435.795 MHz CW
435.910 MHz AX25

Voice Transponder:
Uplink: 145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks: 145.850 MHz
145.870 MHz
145.890 MHz
145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode: V/u

Uplink: 145.900 MHz FM 1200-baud Manchester FSK (reserved)
145.920 MHz FM VOICE
145.940 MHz FM 1200-baud Manchester FSK (reserved)
145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink: 437.026 MHz USB VOICE
(1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
PSK 437.026 MHz LHCP

V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink: 145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink: 145.8500 MHz MFSK 1200 BPS
Uplink: 145.8700 MHz MFSK 1200 BPS
Uplink: 145.8900 MHz MFSK 1200 BPS
Uplink: 145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.8500 - 145.9000 MHz SSB/CW
Downlink 29.4000 - 29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink: 29.4500 - 29.5500 MHz SSB/CW
Beacons: 29.450 MHz
435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
29.4500 MHz CW
[01152007]
=====
OSCAR III

Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink: 145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB

Beacon 1: 29.352 MHz (intermittent)
Beacon 2: 29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-080.S4
WSR 080 Part 4 03/21/2011

AMSAT NEWS SERVICE BULLETIN 080.S4
FROM AMSAT HQ SILVER SPRING, MD, March 21, 2011
TO ALL RADIO AMATEURS
BID: $WSR-080.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Re-entered
Re-entered: October 25, 2009

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[09062010]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 437.325 MHz 9k6 GMSK
437.325 MHz CW 20wpm
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 436.250 MHz 9k6 FHSS
[11112009]
=====
Pollux
Catalog Number: 35693
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25
[09062010]
=====
Castor (ANDE-2)
Catalog Number: 35694
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25
[09062010]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Re-Entered
Re-entered date: August 8, 2010

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[08082010]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

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http://www.amsat.org

Mailing address:
AMSAT-NA

850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

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* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at}
amsat.org
NNNN
/EX

36. ANS-086 AMSAT News Service Weekly Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2011-03-27 01:19:52 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <001001cbec1d$0d997a80$28cc6f80$@net>
Source record: 462
Cross-posted to: rec.radio.amateur.space,rec.radio.info

AMSAT NEWS SERVICE
ANS-086

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* ARISS School Contact Milestone - 600th School Contact on March 17
* KA1SKY McAuliffe-Shepard Discovery Center Operating Events
* How's (Satellite) DX?
* AMSAT Awards Now Accepting Credit From RAC CANADAWARD
* Japan Space Agency Unveils New ISS CubeSat Deployment System
* Satellite Shorts From All Over
* MAKE Magazine Publishes NASA Make: Challenge Rules and Guidelines
* Falcon 9 To Launch SES-8 To GTO In 2013

SB SAT @ AMSAT $ANS-086.01
ARISS School Contact Milestone - 600th School Contact on March 17

AMSAT News Service Bulletin 086.01
>From AMSAT HQ SILVER SPRING, MD.
March 27, 2011
To All RADIO AMATEURS
BID: $ANS-086.01

ARISS reached a milestone on Thursday, March 17 when it held its 600th contact between on-orbit astronaut Cady Coleman, KC5ZTH and students from several schools in Plock and Liszyno, Poland.

The contact supported lessons about space and space exploration, communication and technology. The Scout Amateur Radio Club SP5ZBA handled the radio connection during which the astronaut fielded 19 space related questions. Nearly 120 people were in the audience and came from Plock, Liszyno, Zuromin and Warsaw. There was extensive media coverage that included newspapers, four scientific magazines, one radio magazine, a television station, national radio (two programs) and two internet portals.

Also on Thursday, March 17, Luitpold-Gymnasium Muenchen students in Munich, Germany spoke with Paolo Nespoli, IZ0JPA on the ISS via an ARISS contact. Nespoli answered 19 questions as an audience of over 110 students, teachers and visitors listened.

The contact was the highlight of studies emphasizing aeronautics, scientific work and amateur radio. Several media outlets were present including three radio stations (Bayerischer Rundfunk, Radio Charivari, Radio Arabella), one television station (Bayerisches Fernsehen) and four newspapers (S�ddeutsche Zeitung, Abendzeitung, TZ-M�nchen, M�nch-
ner Merkur). The Bavarian TV channel BR (Bayerisches Fernsehen) posted a clip on its Web site: http://tinyurl.com/62vkve4 (www.br-online.de)

[ANS thanks Carol Jackson, KB3LKI and the ARISS weekly status report for the above information]

/EX

SB SAT @ AMSAT $ANS-086.02
KA1SKY McAuliffe-Shepard Discovery Center Operating Events

AMSAT News Service Bulletin 086.02
>From AMSAT HQ SILVER SPRING, MD.
March 27, 2011
To All RADIO AMATEURS
BID: $ANS-086.02

Amateur Radio Operators at KA1SKY, Amateur Radio Club Station at the McAuliffe-Shepard Discovery Center (DC) in Concord, NH have been working to enhance presentations and programs at the Center through the vehicle of Amateur Radio.

Wayne Santos, N1CKM, Station Manager at KA1SKY would like to hear from AMSAT members in New England who can assist with amateur radio operations from the Discovery Center:

April 29-30 - Aerospacefest Weekend
May 5 - KA1SKY special event station in Commemoration of the 50th Anniversary of the Alan Shepard Manned Space Flight.

Wayne said the Discovery Center also needs assistance to sched-
ule an ARISS contact. If you can help contact Wayne via e-mail at N1CKM@arrl.net.

Information about the McAuliffe-Shepard Discovery Center can be found on-line at: http://www.starhop.com/

KA1SKY features a robust VHF/UHF/Sat station and has been successful with EME and satellite contacts. The station enjoys a highly visible place with many school groups and the public interested in the station. Information about the station is posted at:
http://www.k1bke.org/planetarium/ka1sky.htm
http://www.starhop.com/education-and-exploration/ka1sky.aspx

[ANS thanks Wayne, N1CKM at the McAuliffe-Shepard Discovery Center
for the above information]

/EX

SB SAT @ AMSAT $ANS-086.03
How's (Satellite) DX?

AMSAT News Service Bulletin 086.03
>From AMSAT HQ SILVER SPRING, MD.
March 27, 2011
To All RADIO AMATEURS
BID: $ANS-086.03

March 23 - April 2 ZF2AE/ZF8 Cayman Island

Adrian, AA5UK will be operating portable as ZF2AE from Grand
Cayman and as ZF2AE/ZF8 from Little Cayman from March 23th to
April 5th, 2011.

Most activity will be in the afternoons and evenings using two
FT-817s and an Elk Antenna. He plans to operate holiday style
on the FM and SSB satellites with some HF.

Activity will be from grids: EK99hi from March 23 - 24th, EK99xp
from March 25th - April 2nd (he plans to operate HF during part
of CQ WPX SSB contest while on Little Cayman: 40m to 10 m) and
EK99kh from April 2nd - April 5th.

Time permitting; he will try to make it to grid FK09. Frequently
check AMSAT-BB and http://twitter.com/AA5UK for last minute opera-
tional updates. QSL Direct with SASE, the Bureau, LOTW or eQSL.

April 29 - May 1 XF2P from Isla de Lobos

Operation is planned on AO27, AO51 and SO50 satellites and all
HF bands, plus 6 meters CW, SSB and RTTY. They will also activate
the Lobos Island lighthouse. Operators include Ismael XE1AY; Gustavo
XE1KKK; Francisco Javier XE1P; Ricardo XE1RZL; Ricardo Raymundo
XE1SOV; Fernando XE1VGC; Jose XE1UYU; Martin XE1UZH; Modesto XE1UZU;
Juan Manuel XE2IA; Jose XE2IVG;and Ricardo XE3NMC. QSL via XE1AY.

May 1 - May 8 GS3PYE/P and GS6PYE/P Isle of Arran

Camb-Hams members Bob G1SAA, Terry G3VFC, Martin G3ZAY, Colin G4ERO,
Colin G8TMV, Mark M0MJH, Rob M0VFC, Steve M1ACB and Gavin M1BXF will
be active from a rented cottage near Balliekine, Isle of Arran with
most HF bands, 6 meters, 4 meters (SSB CW, JT65M, FSK441). Satellite
operation is planned, time permitting. QSL direct or via bureau to
M0VFC. Website: http://dx.camb-hams.com/

[ANS thanks Adrian, AA5UK, Cambi-Hams, and the ICPO Bulletin for the
XF2P information]

/EX

SB SAT @ AMSAT $ANS-086.04
AMSAT Awards Now Accepting Credit From RAC CANADAWARD

AMSAT News Service Bulletin 086.04
>From AMSAT HQ SILVER SPRING, MD.
March 27, 2011
To All RADIO AMATEURS
BID: $ANS-086.04

AMSAT Director Contests and Awards, Bruce Paige, KK5DO announced, "In keeping up with technology and limiting duplication of work, AMSAT Awards will now accept a scanned copy the Radio Amateurs of Canada (RAC) CANADAWARD for satellites as proof of working the 13 valid Canadian Provinces." They are:

VE1/VA1 Nova Scotia
VE2/VA2 Quebec
VE3/VA3 Ontario
VE4/VA4 Manitoba
VE5/VA5 Saskatchewan
VE6/VA6 Alberta
VE7/VA7 British Columbia
VE8 Northwest Territories
VE9 New Brunswick
VO1/2 Newfoundland and Labrador
VY0 Nanavut
VY1 Yukon
VY2 Prince Edward

Bruce says, "This will make it easier for everyone to submit either or both, ARRL Worked All States / RAC CANADAWARD and not have to scan all those cards to be checked for AMSAT satellite awards a second time.

[ANS thanks Bruce Paige, KK5DO for the above information]

/EX

SB SAT @ AMSAT $ANS-086.05
Japan Space Agency Unveils New ISS CubeSat Deployment System

AMSAT News Service Bulletin 086.05
>From AMSAT HQ SILVER SPRING, MD.
March 27, 2011
To All RADIO AMATEURS
BID: $ANS-086.05

Information received via Masa, JN1GKZ and the Southgate ARC news site report that the Japan Aerospace Exploration Agency (JAXA) has announced a new ISS CubeSat deployment system. JAXA's ISS small satellite deployment system will use Japan's ISS Experiment module Kibo's airlock and robot arm.

Satellites are planned to be delivered to the ISS in a cushioned bag by Progress or HTV supply ship. The satellites are then mounted in

the deployment pod. The deployment pod is put into the airlock where it is grabbed by the robot arm. The arm then moves the pod into position and deploys the satellites which will re-enter the atmosphere after about 100 days.

JAXA has put out a call for Japanese satellites to demonstrate this new system. The satellites can be 1U, 2U or 3U CubeSat. Total size is 4U. Two to four satellites will be selected (eg 1U+3U, 1Ux2+2U, 1Ux4). The demonstration schedule is:

May 2011: satellites selection
May 2012: deliver satellites to JAXA
Sep 2012 or later: deployment using the new system

The press release material is on the JAXA's web site in Japanese.
http://www.jaxa.jp/press/2011/03/20110302_sac_smallsat.pdf

A Google English version of the press release is available:
http://tinyurl.com/JAXA-Kibo/

[ANS thanks Masa, JN1GKZ and the Southgate ARC news site for the above information]

/EX

SB SAT @ AMSAT $ANS-086.06
Satellite Shorts From All Over

AMSAT News Service Bulletin 086.06
>From AMSAT HQ SILVER SPRING, MD.
March 27, 2011
To All RADIO AMATEURS
BID: $ANS-086.06

+ Congratulations to Allen, N5AFV on making his 50,000th satellite contact on March 23; that's quite an accomplishment!

+ Congratulations to Al, XE2AT on reaching a milestone of 1000 grids worked via satellite after 13 years of operating. Al wrote, "I hope each of you will accept this as my sincere thanks and appreciation for all your help and info. Many thanks to all rovers and maritime mobile and a lot of people that passed along your QTH grid. Thanks to all private mails and BB mails with a lot of kind words."

+ Congratulations to K8YSE for hitting the 900th grid mark with his contact with UT1FG/mm on AO-27 and grid 901st with ND9M/mm on AO-27 on March 24.

+ Congratulations to Nick, KB1RVT on reaching grid #600 in two years using only an Arrow Antenna.

+ Mineo Wakita, JE9PEL invites you to listen to the CW beacon on CO-65 for a special message: HI HI DE JQ1YTC DIGI ON CUTE 1.7 GANBARE JAPAN CUTE 86 CA A4 67 3D 2B 27 A2 61 31 17

Mineo explains 'GANBARE' in Japanese means 'Show spirit' concerning the Earthquake and Tsunami.

+ Astronauts Luca Parmitano (Expedition 36) and Chris Cassidy (Expedition 35) both passed their amateur radio license exams on March 8. Luca Parmitano was issued call sign KF5KDP and Chris Cassidy received KF5KDR.

+ The SO67 schedule for South Africa and Australasia is now posted on http://www.amsatsa.org.za. The next USA week will be 28 March - 10 April, a two week period. The schedule will then continue Europe 11 to 17 April, Central Asia 18 - 24, April and Australasia 25 April to 1 May.

+ Alcatel-Lucent has made the entire Bell System Technical Journal archive available on-line at: http://bstj.bell-labs.com/ (via Jerry, W7QX)

+ http://tinyurl.com/62asmcc will bring you to page from which you may download all the presentations of 1st IAA Conference on University Satellite Missions and Cubesat Workshop in Rome. (Gruppo di Astrodinamica Universit&#65533; degli Studi Sapienza)

+ Sundeep Shah, VU3SXE reports another video of the homebrew AZ EL Rotor by VU2POP is posted at: http://www.youtube.com/watch?v&#65533;Bh29MyqWU

+ F1NSR has made a video showing the AMSAT-UK VHF/UHF FUNcube SDR Dongle being used for a contact on 23cm. Watch at: http://tinyurl.com/4lryfxo (via Southgate ARC site)

+ EuroLuna OZ9LUNA have produced a video showing the testing of their Romit1 CubeSat due for launch later this year. The Euroluna team are currently developing a 2U cubesat Romit1, OZ9LUNA, as part of their attempt to win the Google Lunar X PRIZE. Watch at: http://tinyurl.com/49s6jyp (via Southgate ARC site)

+ A collection of amateur videos of the Discovery STS-133 launch and landing has been posted at the UniverseToday web at: http://tinyurl.com/6bzvd9k

+ NASA TV will cover the Expedition 27 launch for the next three residents of the International Space Station. Russian cosmonaut and Soyuz Commander Alexander Samokutyaev, NASA Flight Engineer Ron Garan and Russian Flight Engineer Andrey Borisenko are scheduled to launch from the Baikonur Cosmodrome at 5:18 p.m. CDT on April 4 (4:18 a.m. Baikonur time on April 5). Streaming video is available at http://www.nasa.gov/ntv

+ Ramon, XE1KK and Luis, LU6QI made a QSO on AO7 in SSB Mode B at 11.12 UTC on March 14, 2011 during the orbit #66247. The distance between Ramon's location (EK09JI) and Luis (FF66TQ) is 6816.7 km. On March 25 Luis made contact with Omar, XE1AO and Keith, N4ZQ)

via AO-7 with both distances a little more than 7000 km apart.

+ AMSAT's Keeper of the Keps, Ray Hoad, WA5QGD reported this week,
"I am pleased to announce that AMSAT's request to re-distribute
AFSPC Keplerian elements from Space-Track has been approved for
the period April 1, 2010 to April 1, 2012. Our USSTRATCOM ODR
(Orbital Data Request) to distribute the KEPs was approved on
March 8, 2010."

+ An interesting photo showing ISS transiting the sun near a group
of sunspots can be viewed at: http://tinyurl.com/4gcuble
(UniverseToday.com)

+ AMSAT area coordinator Clint Bradford, K6LCS, will be presenting
his 'Working Amateur Satellites With Your HT' session at the April 1,
2011 meeting of the Associated Radio Amateurs of Long Beach. All are
welcome to attend.
7PM, April 1, 2011 (no kidding!)
Signal Hill Community Center
1780 E. Hill Street (off Cherry Ave, behind the PD)
Signal Hill CA 90755

+ Clint will be busy ... he will make his 'Working Amateur Satellites
With Your HT' presentation at the April 4, 2011 meeting of the
Corona Norco Amateur Radio Club (CNARC). All are welcome to attend.
7PM, Monday, April 4, 2011
Norco Fire Station
3902 Hillside Ave
Norco 92860-1515

[ANS thanks everyone for the above information]

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SB SAT @ AMSAT $ANS-086.07
MAKE Magazine Publishes NASA Make: Challenge Rules and Guidelines

AMSAT News Service Bulletin 086.07
>From AMSAT HQ SILVER SPRING, MD.
March 27, 2011
To All RADIO AMATEURS
BID: $ANS-086.07

In a press release titled, "NASA Launches 2011 Nationwide Technology
Space Competition for Education", NASA says it's Emerging Commercial
Space Office (ECSO) is teaming with Make Magazine, and Teachers in
Space to help develop spaceflight kits that high school teachers and
students can build and fly on suborbital flights.

Competition rules are simple. Kits should use components that are
likely to be available at most high schools, and submitted experi-
ments must be self-contained and fit in a standard Cubesat container.
To make kits accessible to students nationwide, part of the challenge

is to be able to build these kits for under $100, the kind of funds that could be raised by a school bake sale.

Make Magazine has now published the rules and guidelines for the 2011 NASA Make: Challenge at http://www.makezine.com/space/rules Proposals for the NASA Make: Challenge should be submitted electronically to makespacekits@gmail.com by midnight (Pacific Daylight Savings Time) April 30, 2011.

NOTE: The NASA Make: Challenge is open to all U.S. citizens. Proposers under the age of 18 must include the permission of a parent or guardian to participate.

The winner of the NASA Make: Challenge will win a trip to the Bay Area Maker Faire on May 21 & 22. The winning project will also be published in MAKE Magazine.

Make Magazine is planning a webcast for the week of March 28. This will be an opportunity to learn from experts about developing experiments that can fly in space. They will be available for questions as well.

You can sign up for the Space Challenge mailing list at: http://blog.makezine.com/space

The full NASA Press Release can be found on-line at: http://www.nasa.gov/centers/ames/news/releases/2011/11-14AR.html

[ANS thanks NASA and Make Magazine for the above information]

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SB SAT @ AMSAT $ANS-086.08
Falcon 9 To Launch SES-8 To GTO In 2013

AMSAT News Service Bulletin 086.08
>From AMSAT HQ SILVER SPRING, MD.
March 27, 2011
To All RADIO AMATEURS
BID: $ANS-086.08

A news item from SpaceDaily reported that Space Exploration Technologies (SpaceX) and SES, one of the largest satellite operators in the world, announced an agreement to launch an SES satellite using the Falcon 9 rocket. This will be the first geostationary satellite launch using SpaceX's Falcon 9 rocket. The firm launch agreement with SpaceX also includes an option for a second SES launch.

The SES-8 satellite is scheduled to launch in the first quarter of 2013 from SpaceX's Launch Complex 40 at the Air Force Station at Cape Canaveral, Florida.

Full story can be found on-line at: http://tinyurl.com/4al2rk8

[ANS thanks SpaceDaily.com for the above information]

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In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office. And with that keep in mind the ham who endured a long losing stretch at the racetrack. He decided to take up horseback riding but could not figure out how to make his horse stop. He called out, "How do I make it stop!?" ... some-one yelled back, "Put a bet on it!"

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

37. 4075 Solutions manual to Mechanics, Mechanical Engineering and Aerospace Engineering Books

Newsgroup: rec.radio.amateur.space
Date: 2011-03-27 19:15:40 UTC
From: claudeh <hclaudioblanco@gmail.com>
Message-ID: <44f1c7f2-94f1-4e0d-878e-5b2995b43f1b@j13g2000pro.googlegroups.com>
Source record: 463

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Solution Manual Mechanical Engineering Principles (Bird & Ross)
Solution Manual Dynamics of Mechanical Systems (C.T.F. Ross)
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Solution Manual Introduction to Engineering Analysis (1st Ed., Hagen)
Solution Manual Introduction to Engineering Analysis (2nd Ed., Hagen)
Solution Manual Introduction to Engineering Analysis (3rd Ed., Hagen)
Solution Manual Engineering Design (Rudolph J. Eggert)
Solution Manual Creative Design of Products and Systems (Saeed Niku)
Solution Manual Fundamentals of Engineering Design (2nd Ed., Barry Hyman)
Solution Manual Engineering Design (4th Ed., George Dieter & Linda Schmidt)
Solution Manual Engineering Design and Graphics with Autodesk Inventor 2009 (James Bethune)
Solution Manual Engineering Design : A Project-Based Introduction (2nd Ed., Clive Dym & Patrick Little)
Solution Manual Engineering Design : A Project-Based Introduction (3rd Ed., Clive Dym & Patrick Little)
Solution Manual Tools and Tactics of Design (Dominick, Demel, Lawbaugh, Freuler, Kinzel & Fromm)
Solution Manual Engineering Analysis in Applied Mechanics (John Brewer)
Solution Manual Engineering Fluid Mechanics (William Graebel)
Solution Manual Advanced Fluid Mechanics (William Graebel)
Solution manual Essential Computational Fluid Dynamics (Oleg Zikanov)
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Solution Manual Introduction to Thermodynamics and Heat Transfer (2nd Ed., Yunus Cengel)
Solution Manual Fundamentals of Thermal-Fluid Sciences (1st Ed., Yunus Cengel)
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Solution Manual Fox and McDonald's Introduction to Fluid Mechanics (8th Ed., Philip Pritchard)
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Solution Manual Fluid Mechanics (4th Ed., Kundu & Cohen)
Solution Manual Elementary Fluid Mechanics (7th Ed., Street, Watters & Vennard)
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Solution Manual Fundamentals of Fluid Mechanics (4th Ed., Bruce Munson, Donald Young, Theodore Okiishi)
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Date: 2011-03-29 18:08:38 UTC
From: BERGH <mattosbw1@gmail.com>
Message-ID: <e4dd623a-c080-49f6-9e3b-7ed4827994fa@r19g2000prm.googlegroups.com>
Source record: 473

List of Solutions Manuals and Test Banks

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contact me to : mattosbw1@gmail.com
mattosbw1(at)gmail.com

NOTE : "THIS SERVICE IS NOT AVAILABLE FOR : CHINA, INDIA, RUSSIA, PAKISTAN, IRAQ, IRAN, PHILIPPINES, NORTH KOREA, NEPAL, BANGLADESH, SRI LANKA, MALDIVES, BHUTAN & COLOMBIA".

If your wanted solutions manual is not in this list, also can ask me if is available (it is a partial list). Then if you need solutions manual only contact me by email.

"ARE NOT AVAILABLES BOOKS IN DIGITAL FORMAT", ONLY SOLUTIONS MANUALS AND TEST BANKS.

This same "list of titles" of texts with availables solutions manual and/or test banks is for download from :

http://www.megaupload.com/?d=ADDS77XH

I do not review the forums, just send me an email.

- Materials Engineering :

Solution manual Fundamentals of Modern Manufacturing : Materials, Processes, and Systems (3rd Ed., Mikell Groover)
Solution manual Fundamentals of Modern Manufacturing : Materials, Processes, and Systems (4th Ed., Mikell Groover)
Solution manual Fundamentals of Manufacturing (2nd Ed., Philip D. Rufe)
Solution manual Principles of Metal Manufacturing Processes (Beddoes & Bibby)
Solution manual Materials Science for Engineering Students (Traugott Fischer)
Solution manual Essentials of Modern Materials Science and Engineering (James Newell)
Solution manual Materials Science and Engineering : An Introduction (6th Ed., William Callister)
Solution manual Materials Science and Engineering : An Introduction (7th Ed., William Callister)
Solution manual Materials Science and Engineering : An Introduction (8th Ed., William Callister)
Solution manual Fundamentals of Materials Science and Engineering : Integrated Approach (2nd Ed., William Callister)

Solution manual Fundamentals of Materials Science and Engineering : Integrated Approach (3rd Ed., William Callister)
Solution manual Science and Design of Engineering Materials (2nd Ed., Schaffer, Saxena, et al)
Solution manual Manual of Mineral Science (23rd Ed., Cornelis Klein & Barbara Dutrow)
Solution manual Materials and Processes in Manufacturing (9th Ed., E. Paul DeGarmo, J. T. Black, Ronald A. Kohser)
Solution manual DeGarmo's Materials and Processes in Manufacturing (10th Ed., E. Paul DeGarmo, J. T. Black, Ronald A. Kohser)
Solution manual Foundations of Materials Science and Engineering (3rd Ed, Smith)
Solution manual Foundations of Materials Science and Engineering (4th Ed, Smith & Hashemi)
Solution manual Foundations of Materials Science and Engineering (5th Ed, Smith & Hashemi)
Solution manual Engineering Materials Science (Milton Ohring)
Solution manual Metal Fatigue in Engineering (2nd Ed., Stephens, Fatemi & Fuchs)
Solution manual Mechanical Behavior of Materials (3rd Ed. Dowling)
Solution manual Mechanical Behavior of Materials (W.F. Hosford)
Solution manual Mechanical Behavior of Materials (Keith Bowman)
Solution manual Deformation and Fracture Mechanics of Engineering Materials (4th Ed., Richard Hertzberg)
Solution manual From Polymers to Plastics (A.K. van der Vegt)
Solution manual Nanoengineering of Structural, Functional and Smart Materials (Mark Schulz, Ajit Kelkar, Mannur Sundaresan)
Solution manual Principles Of Polymer Systems (5th Ed., by Ferdinand Rodriguez, Claude Cohen, Christopher Ober, Lynden Archer)
Solution manual Introduction to the Thermodynamics of Materials (4th Ed. David Gaskell)
Solution manual Structure and Properties of Engineering Materiales (5th Ed., Daniel Henkel & Alan Pense)
Solution manual Plastics : Materials and Processing (3rd Ed., Strong)
Solution manual Engineering Materials : Properties and Selection (8th Ed., Budinski)
Solution manual Engineering Materials : Properties and Selection (9th Ed., Budinski)
Solution manual Introduction to Materials Science for Engineers (6th Ed., Shackelford)
Solution manual Introduction to Materials Science for Engineers (7th Ed., Shackelford)
Solution manual Introduction to Materials Science for Engineers - International Edition (7th Ed., Shackelford)
Solution manual Creative Design of Products and Systems (Saeed Niku)
Solution manual Materials : Engineering, Science, Processing and Design (1st Ed., Michael Ashby, Hugh Shercliff & David Cebon)
Solution manual Materials : Engineering, Science, Processing and Design (2nd Ed., Michael Ashby, Hugh Shercliff & David Cebon)
Solution manual Engineering Materials Vol. 1 : An Introduction to

Properties, Applications and Design (3rd Ed., Michael Ashby & David Jones)
Solution manual Engineering Materials Vol. 2 : An Introduction to Microstructures, Processing and Design (3rd Ed., Michael Ashby & David Jones)
Solution manual Materials and the Environment : Eco-informed Material Choice (Michael Ashby)
Solution manual Principles of Corrosion Engineering and Corrosion Control (Zaki Ahmad)
Solution manual Analysis and Performance of Fiber Composites (3rd Ed., Bhagwan Agarwal, Lawrence Broutman & K. Chandrashekhara)
Solution manual Basic Engineering Plasticity : An Introduction with Engineering and Manufacturing Applications (David Rees)
Solution manual Steels : Microstructure and Properties (3rd Ed. Bhadeshia & Honeycombe)
Solution manual Theory of Plasticity (3rd Ed. Jagabanduhu Chakrabarty)
Solution manual Plastics : Microstructure and Engineering Applications (3rd Ed., Nigel Mills)
Solution manual Laser Processing of Engineering Materials : Principles, Procedure and Industrial Application (John Ion)
Solution manual Sintering : Densification, Grain Growth and Microstructure (Suk-Joong Kang)
Solution manual Biomaterials : An Introduction (3rd Ed., Joon Park & R.S. Lakes)
Solution manual Biomaterials : The Intersection of Biology and Materials Science (Temenoff & Mikos)
Solution manual Biomaterials Science : An Introduction to Materials in Medicine (2nd Ed., Ratner, Hoffman, Schoen & Lemons)
Solution manual Tissue Engineering (Bernhard O. Palsson & Sangeeta N. Bhatia)
Solution manual Tissue Engineering (Clemens van Blitterswijk, et al.)
Solution manual Introduction to Materials Management (6th Ed., Arnold, Chapman & Clive)
Solution manual Fundamentals of Solid State Engineering (2nd Ed., Manijeh Razeghi)
Solution manual Smart Electronic Materials : Fundamentals and Applications (Jasprit Singh)
Solution manual Composite Materials : Science and Engineering (2nd Ed., Krishan K. Chawla)
Solution manual Laminar Composites (George Staab)
Solution manual Physical Metallurgy and Advanced Materials (7th Ed., R.E. Smallman & A.H.W. Ngan)

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mattosbw1(at)gmail.com

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48. Crossposting Permitted to rec.radio.amateur.moderated

Newsgroup: rec.radio.amateur.space
Date: 2011-04-01 06:00:03 UTC
From: rram@panix.com
Message-ID: <radio/ham-radio/moderated/crossposting-1-1301637601@panix.com>
Source record: 474
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.info

```
Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/moderated/crossposting
Revision: 1.1 2009/04/12 19:42:04
Posting-Frequency: posted monthly
URL: http://www.panix.com/~rram/usenet/rram/index.html

Changes followed by "|".

After a 30-day public discussion and feedback period to gauge reader
opinions in March of 2009:

http://groups.google.com/group/rec.radio.amateur.moderated/browse_thread/thread/d7d337db35
f23326

the rec.radio.amateur.moderated Moderation Team has decided to consider
amending its charter, and permit limited simultaneous crossposting to
rec.radio.amateur.moderated and one other unmoderated
amateur-radio-related discussion newsgroup. We are currently trying
this on a temporary basis (90 days, through early July 2009), and adopt
it permanently if successful.

Approved rec.radio.amateur.* newsgroups are those that are currently
listed in the latest version of the "List of Big Eight Newsgroups" which
is crossposted monthly to news.announce.newgroups, news.groups, and
news.lists.misc.

Approved alt.radio.amateur.* and alt.ham-radio.* newsgroups are those
that have been created consistent with the suggestions in "So You Want
to Create an Alt Newsgroup" at:

http://www.faqs.org/faqs/alt-creation-guide/

Approved regional hierarchy newsgroups are those that contain either
"radio.amateur" or "ham-radio" in their names, including
uk.radio.amateur and aus.radio.amateur.misc.

We will make every reasonable effort to keep our list of approved
newsgroups up-to-date. In case we have overlooked any, and a submission
is rejected in error as a result, the rejected submitter can E-mail us
at our administrative contact address (in the signature at the bottom of
this article, and the default Reply-To for the rejection message)
requesting that it be added, and that the article be approved. We may
still choose to reject articles crossposted to any alt.* newsgroup with
an inappropriate name, including obscene language, embedded
name-calling, or encouragement of unlawful conduct.
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Please direct any comments, questions, or criticisms to
rec-radio-amateur-moderated-request@panix.com.

49. ANS-092 AMSAT News Service Weekly Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2011-04-03 13:55:19 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <001201cbf206$be103590$3a30a0b0$@net>
Source record: 475
Cross-posted to: rec.radio.amateur.space,rec.radio.info

AMSAT NEWS SERVICE
ANS-093

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* ARISSat-1 Operations on 12 April 2011
* Celebrate Yuri - ARISSat-1 Activation
* AMSAT Gets Ready for Dayton Hamvention 2011
* Satellite Shorts From All Over
* ARISS Recent School Contacts

SB SAT @ AMSAT $ANS-093.01
ARISSat-1 Operations Possible 11-13 April UTC

AMSAT News Service Bulletin 093.01
From AMSAT HQ SILVER SPRING, MD.
April 3, 2011
To All RADIO AMATEURS
BID: $ANS-093.01

The ARISSat-1 satellite, presently still inside the ISS, will be turned on and use an external antenna from the afternoon of 11 April UTC through the morning of 13 April to celebrate the 50th anniversary of Yuri Gagarin's first manned space flight. More specific times will be announced as they become available.

AMSAT will support this event and issue certificates to those stations reporting reception of the ARISSat-1 signals. Roscosmos has announced that the satellite will be deployed into orbit during the next EVA in July of this year.

The release of a development version of the BPSK/CW decoding software next week. Schedule specifics of the 12 April operation transmissions are not available yet. These will be posted on the AMSAT and ARISSat1 web sites and in ANS when available.

The transmissions on the 12th will see ARISSat-1 in low power mode, this

means 40-60 secs on, 2 minutes off. It should be a challenge to find and

tune the CW signal then decode some BPSK data during the short on times.

This mode was developed to be used when the batteries are low or the sat-
ellite is in eclipse. During this even data and information will be col-
lected to improve the BPSK demodulating, decoding and display software.
Those with the FUNcube Dongle and SDR-IQ and variants are encouraged to
record the wideband transmissions to help us better understand the signals
and improve the ground station software. Information on where to send the
recordings will be available on the AMSAT and ARISSat1 Web sites.

[ANS thanks Gould, WA4SXM, for the above information]

/EX

SB SAT @ AMSAT $ANS-093.02
Celebrate Yuri - ARISSat-1 Activation

AMSAT News Service Bulletin 093.02
From AMSAT HQ SILVER SPRING, MD.
April 3, 2011
To All RADIO AMATEURS
BID: $ANS-093.02

RSVP MANDATORY - April 12 is bringing us the 50th anniversary of Yuri
Gagarin's space flight - as well as (hopefully!) an activation of
ARISSat-1.

Clint Bradford, K6LCS, invites those in the Mira Loma, CA area to come
and have some fun that night!

The party Web site URL is
http://tinyurl.com/YURI-K6LCS

There will be exclusive videos to share (even one from Bill Nye, the
Science Guy!), history to relate, and - if all works well (grin) -
Clint will record celebratory transmissions from the International
Space Station and amateur radio satellite ARISSat-1 at 5AM that morn-
ing to show you all while you are here! (There's another great pass
of the ISS at 9:41PM - but that's technically April 13 GMT...)

Let's use this date to promote everything we've been working on for
years: the ham radio hobby, AMSAT, and the future of manned space
travel.

RSVP MANDATORY - So we'll know how many goodies to have on hand! Send
an email as soon as you can, please! FAMILY- AND CHILDREN-FRIENDLY! (No
pony rides, but they can pet noses of our horse and donkey!)

Appetizers, soft drinks, a little wine, and miscellaneous munchies will
be served. Prizes, handouts, and freebies to all. The rumor that an

offi-
cial "Yuri Gagarin Commemorative T-Shirt" being given away as a door
prize has been ... VERIFIED!

Bring a light jacket - in case we try to work the 9:41PM pass. S'mores
and fire pits outside? OF COURSE! Rain or shine ...

Tuesday, April 12, 2011 - 6PM to 10PM
Clint and Karen Bradford's house
5085 Trail Canyon Drive
Mira Loma CA 91752
909-241-7666 - Clint cell
Email - clint@clintbradford.com

[ANS thanks Clint, K6LCS, for the above information]

/EX

SB SAT @ AMSAT $ANS-093.03
AMSAT Gets Ready for Dayton Hamvention 2011

AMSAT News Service Bulletin 093.03
From AMSAT HQ SILVER SPRING, MD.
April 3, 2011
To All RADIO AMATEURS
BID: $ANS-093.03

The 2011 Dayton Hamvention will be held this year May 20-22. This
year featured AMSAT attractions include:

+ Operational ARISSat-1 Prototype
+ Astronaut Doug Wheelock, KF5BOC, will be attending as a special
guest of the ARRL and AMSAT. Doug will visit the AMSAT booth on
both Friday and Saturday.
+ AMSAT theme for 2011 is "Providing Education Through Amateur
Satellites"

Check out AMSAT's Hamvention posted at ...
http://www.amsat.org/amsat-new/hamvention/2011/Dayton.php
for the latest events:

+ AMSAT theme for 2011 is "Providing Education Through Amateur
Satellites"

+ ARISSat-1

+ AMSAT Thursday Night Get-together

+ AMSAT Forum

+ AMSAT/TAPR Banquet

This is the 60th year of the Dayton Hamvention, sponsored by DARA
(Dayton Amateur Radio Association). As has been the case for the
many years the Hamvention will be at the Hara Arena Complex on the

north side of Dayton. Further information on Hamvention 2011, including advance ticket sales and motel accommodations, can be found at http://www.hamvention.org.

AMSAT will occupy the same booths (444-449) in Ball Arena, right across from the ARRL area and just inside the door from the Satellite Demonstration area. Plan to visit all of the AMSAT activities!

AMSAT/TAPR Banquet

The fifth annual AMSAT/TAPR Banquet will be Friday night May 20 at the Kohler Presidental Banquet Center. The Banquet speaker will be David Rowe, VK5DGR talking on The Village Telco. Additional information about the talk can be found on the AMSAT Web site, 2011 Hamvention,

Banquet page.

Seating is limited and reservations are required. Go to the Dayton Banquet 2011 link:
http://www.amsat.org/amsat-new/hamvention/2011/Banquet.php to find information about reservations and additional information.

AMSAT Hotel

AMSAT has only a few rooms left in the reserved block at the Country Inn & Suites in Fairborn, OH. Please contact Martha at the AMSAT office for room price and availability during Hamvention. Priority for rooms will be given to those volunteering to work in the AMSAT booth for multiple 2 hour shifts during Hamvention. The phone number for the AMSAT office is 301-589-6062. Other hotels in the immediate area of the Country inn & Suites include the Fairfield Inn, Ramada Inn, Hampton Inn, Fairborn Holiday Inn, Red Roof Inn and the Homewood Suites if additional accommodations are needed.

[ANS thanks Gould Smith, WA4SXM for the above information]

/EX

SB SAT @ AMSAT $ANS-093.04
Satellite Shorts From All Over

AMSAT News Service Bulletin 093.04
From AMSAT HQ SILVER SPRING, MD.
April 3, 2011
To All RADIO AMATEURS
BID: $ANS-093.04

+ Look for Bryan, KL7CN to be active in a holiday-style DXpedition on the FM satellites from various Caribbean locations starting Sunday, April 3. Bryan will start /KP4 from San Juan, and then operate /MM from as many grids as we can, followed by J6/ from St. Lucia, then as V25CN from Antigua, then as a very special FS/PJ7 operation from the border monument on St. Martin, then

/KP2 from St. Croix, and finally again as /KP4.

+ A video of the March 26 launch of an Amateur Radio near-space
balloon by the Old Towne Middle School in Ridgeland, MS is now
available at: http://tinyurl.com/42ufohw (Southgate)

+ Two videos of the Amateur Radio satellite SwissCube are now
available at: http://tinyurl.com/3uqlhn4 (Southgate)

+ Russia's Elektro-L weather forecasting spacecraft captured a
stunning view of the Moon over the Red Sea region of the Earth.
It can be viewed at:http://tinyurl.com/4ajwqs5 (UniverseToday)

+ NASA is offering you a chance to vote for your favorite tunes
to be played as the wake up song during the STS-134 mission, which
is currently scheduled to launch on April 19, 2011. Voting will
be open until mission launch day. You can find the list and listen
to the songs and cast your vote at:
https://songcontest.nasa.gov/toporig.aspx

+ Austin, Texas Fox News coverage of the ARISS school contact with
the Lehman High School in Kyle, Texas is posted at:
http://tinyurl.com/iss-lehman

+ AMSAT's Keeper of the Keps, Ray Hoad, WA5QGD reported this week,
the following two changes have been made to the KEP distribution:
1. FAST1-2 has separated into FAST1 and FAST2. Each now has its
own set of KEPs as FAST1 (cat# 37227) and FAST2 (cat# 37380).
2. The Cat# of NANOSAIL-D (listed in the KEPs as NANOSALD) has been
corrected from Cat# 37225 to Cat# 37361 per Spacetrack website.
You can subscribe to the AMSAT Keps mailing list at:
http://amsat.org/mailman/listinfo/keps

+ Congratulations and welcome home to Jim, ND9M/VQ9JC on the completion
of a two month sea voyage where he provided dozens of wet-grids from
his maritime mobile operation. Jim says he is working on getting his
logs together and post a trip wrap up in a few days once he gets the
numbers compiled. Jim wrote, "Thanks for helping to make the
two-month
voyage a memorable one!"

+ Luis, LU6QI reported continued success in stretching AO-7's footprint
with a Mode B contact on March 26 with Sebastian, W4AS for a distance
of 6715 km.

+ Tetsu, JA0CAW has posted three videos showing the AMSAT-UK FUNcube
SDR Dongle being used to receive satellites:
1. Using FUNcube Dongle with DK3WN satcontrol_fcd software, SDRadio
software, and Delfi-C3 RASCAL software to decode telemetry:
http://www.youtube.com/watch?v=-RphZikoA
2. FUNcube Dongle receiving AO-51 satellite:
http://www.youtube.com/watch?v=jKwVlMqCc&NR= 3. FUNcube Dongle receiving UO-11 satellite:
http://www.youtube.com/watch?v=rNvhRIqmo

+ Dave, KB1PVH is heading up the July 4th 13 Colonies Special Event.
He is in need of satellite operators from NH, CT, NJ, and most
likely RI. If you are from one of those states and want to be a part
of the event email Dave directly at: kb1pvh@gmail.com More infor-
mation of the 13 Colonies Special Event can be found on-line at:
http://www.13colonies.info/

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-093.05
ARISS Recent School Contacts

AMSAT News Service Bulletin 093.05
From AMSAT HQ SILVER SPRING, MD.
April 3, 2011
To All RADIO AMATEURS
BID: $ANS-093.05

On Wednesday, March 23, Paolo Nespoli, IZ�JPA spoke with students from Istituto Comprensivo di Verano Brianza - Scuola Media in Italy via an Amateur Radio on the International Space Station (ARISS) contact. Nespoli, an alumnus of the school, exchanged greetings with the youth and answered 15 of their questions. Approximately 250 students, teachers and guests were on hand for the event which received regional and local media coverage. The contact supplemented course studies emphasizing astronautics, astronomy, radio techniques and English.

Students from two schools in Italy, Istituto Comprensivo "G. Manzi" and Istituzione Scolalstica "Saint-Roch" jointly participated in an Amateur Radio on the International Space Station (ARISS) contact with astronaut Paolo Nespoli, IZ�JPA on Saturday, March 26. The activity was part of a curriculum concentrating on space, technology and human spaceflight. Nespoli fielded thestudents' 34 questions over 2 consecutive ISS passes as 400 students and visitors gathered for the event. Regional and local media reported the event.

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the
President's Club. Members of the President's Club, as sustaining donors
to AMSAT Project Funds, will be eligible to receive additional benefits.

Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

50. Weekly Highlights of Solar and Geomagnetic Activity, 21 - 27 March 2011

Newsgroup: rec.radio.amateur.space
Date: 2011-04-04 20:27:52 UTC
From: SWPC.Webmaster@noaa.gov
Message-ID: <20110404202700.A781C33C6C@panix2.panix.com>
Source record: 476
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.info

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:Product: Weekly Highlights and Forecasts
:Issued: 2011 Mar 29 1817 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
# Weekly Highlights and Forecasts
#
Highlights of Solar and Geomagnetic Activity
21 - 27 March 2011

Solar activity ranged from very low to moderate levels. Region 1176
(S16, L=199, class/area Fki/420 on 26 March) rotated onto the
visible disk on 21 March, and produced a long duration C4 flare. Low
levels of activity continued through the 22nd. Activity increased to
moderate levels from 23-25 March as Region 1176 produced one M1
flare each day (23/0217Z, 24/1207Z, 25/2322Z). Partial halo CMEs
associated with the M1 flares on the 24th and 25th were observed.
The first had an estimated plane-of-sky speed of 421 km/s; the
second was accompanied by Type II (673 km/s), Type IV, and 10.7 cm
(170 sfu) radio emissions. A fast (approx. 850 km/s), asymmetric,
partial halo CME was observed on 26 March was attributed to Region
1180 (N25, L=162, class/area Hsx/070 on 26 March), but was not
expected to be potentially geoeffoective. Only the CME from the 24th
was expected to have geoeffective potential. Of the four remaining
active regions, Region 1178 (S15, L=172, class/area Dai/130) was the
largest.

The greater than 10 MeV proton flux at geosynchronous orbit rose
above 10 pfu on 21 March at 1950Z and reached a maximum of 14 pfu on
22 March at 0130Z and ended that day at 0335Z. The most likely
source of the event was a flare and back-sided CME.

The greater than 2 MeV electron flux at geosynchronous orbit was at
normal levels throughout the period.

The geomagnetic field was quiet for the majority of the period,
except for a few instances of unsettled conditions on 24 March due
to Coronal Hole (CH) high speed stream (HSS) effects.

Forecast of Solar and Geomagnetic Activity
30 March - 25 April 2011

Solar activity is forecast to be low for the period with C-class
flares expected and a chance for M-class flares exists based on the
```

size and magnetic complexity of Regions 1176 and 1183 (N15, L= 136, class/area Eai/250 on 28 March). Region 1176 is expected to remain on the disk through 05 April and Region 1183 will rotate off the west limb on 09 April, if it does not decay prior. Old Region 1169 which is anticipated to return on 31 March produced an M4.2/1N flare during the last rotation. Imagery from STEREO-B spacecraft as well as brightening on the east limb on GOES 15 SXI and NASA SDO AIA 193 suggest that the region may remain prominent this rotation as well.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to reach high levels on 01-02 April.

Geomagnetic activity is expected to range from quiet to unsettled levels. Unsettled levels are expected 30 - 31 March, 07 - 09 April, and 18 - 19 April, with a slight chance for an isolated active to minor storm period at high latitudes due to anticipated recurrent coronal holes. Predominantly quiet levels are expected for the remainder of the period.

51. Weekly Highlights of Solar and Geomagnetic Activity, 28 March - 03 April 2011

Newsgroup: rec.radio.amateur.space
Date: 2011-04-06 01:30:06 UTC
From: SWPC.Webmaster@noaa.gov
Message-ID: <20110406013002.5B3E033C6C@panix2.panix.com>
Source record: 477
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.info

```
:Product: Weekly Highlights and Forecasts
:Issued: 2011 Apr 05 2218 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
# Weekly Highlights and Forecasts
#
Highlights of Solar and Geomagnetic Activity
28 March - 03 April 2011

Solar activity ranged from very low to low levels throughout the
period. C-class events were observed every day except for 02 April.
Region 1181 (S26, L=157, class/area Hsx/20 on 27 March) produced a
C1/Sf flare at 27/2326Z and Region 1178 (S15, L=172, class/area
Dai/130 on 26 March) produced a C1/Sf flare at 31/2221Z with an
associated partial halo CME that appeared to be directed southward
below the ecliptic plane. Region 1183 (N15, L=135, class/area
Eai/330 on 30 March) rotated on the disk on 27 March and contributed
four C-class events, the largest a C1 at 30/2005Z. No X-ray sensor
data was available at 27/0600Z when a CME was observed in LASCO C2
and C3 imagery. However, the CME was attributed to Region 1183 based
on limited GOES 15 SXI imagery. Type II (651 km/s S.V.) and Type IV
radio signatures were observed at 27/0511 associated with this
event. Region 1176 (S15, L=196, class/area Eko/490 on 23 March)
produced four C-class events and four CMEs during the period. The
only CME that is potentially geoeffective was associated with a
B8/Sf flare observed at 02/2347Z. At 03/0024Z, GOES-15 SXI imagery
detected material movement from the SW limb that was later observed
in SEREO-B COR2 imagery at 03/0109Z and STEREO-A COR2 imagery at
03/0409Z. Using this imagery, a plane-of-sky speed of approximately
650 km/s was assigned. This CME appeared to be directed southward
out of the ecliptic plane but it was a very large event and has the
potential to cause enhanced activity at Earth.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at
moderate levels from 28 - 29 March and then decreased to normal
levels from 30 March - 01 April. An increase to moderate levels was
observed on 02 April and high levels were observed on 03 April. The
1000 pfu threshold was reached at 03/0735Z.
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Geomagnetic field activity ranged from quiet to major storm levels throughout the period. Quiet conditions prevailed from 28 March through midday on 01 April. A weak geomagnetic Sudden Impulse (SI) was observed at 29/1604Z (8 nT as measured at the Boulder magnetometer). The SI likely represented the passage of a halo CME observed on 24 March. ACE solar wind data indicated increased velocities (313 to 398 km/s), as well as increases in density of (2 to 26 p/cc) and the total field (Bt 5 to 9 nT). Interplanetary Magnetic Field (IMF) Bz remained mostly northward following the passage. By midday on 01 April, ACE solar wind observations indicated the onset of a coronal hole high speed stream (CH HSS) at approximately 01/1600Z. Velocities steadily increased from about 360 km/s to a peak of 665 km/s at 02/2128Z. IMF changes associated with the CH HSS included increased Bt (peaks to 12 nT from 01/2000 - 2100Z) and intervals of southward Bz (maximum deflection of -10 nT at 01/1628Z). The geomagnetic field responded with periods of unsettled to active levels, including an isolated minor storm period observed at high latitudes at 01/1500Z. These conditions persisted through 03 April with an isolated major storm period observed at high latitudes at 02/1200Z and another isolated minor storm at high latitudes at 03/1200Z.

Forecast of Solar and Geomagnetic Activity
06 April - 02 May 2011

Solar activity is expected to be very low to low for the majority of the period. A chance for M-class activity exists from 17 - 30 April due to the return of Region 1176.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at high levels from 06 - 07 April and then return to normal to moderate levels for the remainder of the period.

Geomagnetic field activity is expected to be quiet to unsettled from 07 - 08 April due to the effects of a recurrent CH HSS becoming geoeffective. Quiet conditions are expected from 09 - 16 April. A second CH HSS is expected to be geoeffective from 17 - 19 April bringing with it quiet to unsettled conditions. Mostly quiet conditions are expected from 20 - 27 April. Unsettled to active conditions with a chance for isolated minor storm periods at high latitudes are expected due to a third CH HSS that is expected to become geoeffective on 28 April. A return to quiet conditions is anticipated on 02 May as the effects from the CH HSS wane.

52. Radio Meteor Obs. Bull. March 2011

Newsgroup: rec.radio.amateur.space
Date: 2011-04-08 17:56:02 UTC
From: Chris Steyaert <observations@rmob.org>
Message-ID: <vviup6lu0vfmdvhpsnuiskll8vi7j97huh@4ax.com>
Source record: 478
Cross-posted to: rec.radio.amateur.space,sci.astro.amateur

Radio Meteor Observation Bulletin No. 212 of March 2011 (92 K) is available now as

http://www.rmob.org/rmobtext/rmob1103.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

Chris

53. SEXY HOT PHOTOS

Newsgroup: rec.radio.amateur.space
Date: 2011-04-11 10:01:19 UTC
From: devi <satyamsivam9030@gmail.com>
Message-ID: <ed7f1254-6456-429f-b981-bffd5cbff995@24g2000yqk.googlegroups.com>
Source record: 479

hot lipkiss
http://hotactressstoyou.blogspot.com/2011/04/lipkiss-2.html
lipkiss in without dress
http://hotactressstoyou.blogspot.com/2011/04/lipkiss.html
seepika padukone sexy back look
http://hotactressstoyou.blogspot.com/2011/04/deepika-padukone.html
sexy katrina kaif
http://hotactressstoyou.blogspot.com/2011/04/katrina-kaif.html
beauty keerthi chawla
http://hotactressstoyou.blogspot.com/2011/04/keerthi-chawla.html
saloni sexy photos
http://hotactressstoyou.blogspot.com/2011/04/saloni.html
deeksha seth in a hot saree
http://hotactressstoyou.blogspot.com/2011/04/deeksha-seth.html
asin hot wallpapers
http://hotactressstoyou.blogspot.com/2011/04/asin.html
ramba in a red dress
http://hotactressstoyou.blogspot.com/2011/04/ramba.html
sexy ilieana is in scert
http://hotactressstoyou.blogspot.com/2011/04/ileana.html

54. ANS-100 AMSAT News Service Weekly Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2011-04-12 16:51:04 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <001201cbf931$c8d81830$5a884890$@net>
Source record: 480
Cross-posted to: rec.radio.amateur.space,rec.radio.info

AMSAT NEWS SERVICE
ANS-100

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* ARISSat-1 to Help Celebrate Gagarin Flight Anniversary
* Adding doppler files for the ISS ARRISSsat-1 Activation
* AMSAT at National Air and Space Museum's Space Day
* Satellite Shorts from all over
* ARISS Recent School Contacts
* AMSAT Awards
* New OSCAR Numbers

SB SAT @ AMSAT $ANS-100.01
ARISSat-1 to Help Celebrate Gagarin Flight Anniversary

AMSAT News Service Bulletin 100.01
>From AMSAT HQ SILVER SPRING, MD.
April 10, 2011
To All RADIO AMATEURS
BID: $ANS-100.01

ARISSat-1 to Help Celebrate Gagarin Flight Anniversary

ARISSat-1 transmissions from the ISS will be used to help celebrate man's 50th year in space. Yuri Gagarin became the first man in space on 12 April 1961.

Fifty years later on 12 April 2011 the Russians will have a nation-wide commemoration of this historic event. The ARISSat-1/RadioSkaf-V satellite on board the ISS and awaiting deployment in late July of 2011 will be turned on and transmit during the celebration period. The transmissions will begin on Monday 11 April 2011 at 14:30 UTC and continue until 10:30 UTC on 13 April 2011.

Due to the fact that the solar panels are covered, the satellite will be powered only by the onboard battery. The satellite will run in low power mode. This means that the transmissions will cycle ON/OFF. They will be On for 40-60 seconds and Off for 2 minutes.

The FM transmissions on 145.95 MHz will contain an ID for the satellite, call sign RS01S, international greeting messages, spoken telemetry values and SSTV images. There will also be CW transmitted on 145.919 MHz and SSB BPSK-1000 telemetry data on 145.920 MHz.

ARISSatTLM software can be used with a computer soundcard to tune, receive, demodulate, decode and display the telemetry values if tuned correctly. The transponder will not be active during this event.

AMSAT will issue commemorative certificates to those receiving the transmissions and sending an email to gagarin@arissat1.org or yuri@arissat1.org with your name or group, a description of what you heard and the UTC time you heard it. Recording the Battery voltage values and the UTC time you received them will be especially helpful.

One of the messages will be a conversation between Yuri Gagarin and ground control. The ARISS team is working to get the D-700 aboard the ISS to also transmit the FM signals on 437.550 MHz.

[ANS thanks Gould, WA4SXM, for the above information]

/EX

SB SAT @ AMSAT $ANS-100.02
Adding doppler files for the ISS ARRISSsat-1 Activation

AMSAT News Service Bulletin 100.02
>From AMSAT HQ SILVER SPRING, MD.
April 10, 2011
To All RADIO AMATEURS
BID: $ANS-100.02

Alan, WA4SCA has worked out the ARISSat-1 data to add to the SATPC32 tracking software for the April 11 - April 13 activation aboard the ISS.

Alan wrote, "If you are going to be listening for ARISSat-1 and use SATPC32, you will be using the ISS for antenna tracking, but you will need to add a few modes in the DOPPLER.SQF file for the ISS."

ISS,145918.5,0,USB,,,0,0,BPSK/CW-2
ISS,145950.0,0,FM,,,0,0,VOICE/SSTV
ISS,145938.5,0,USB,,,0,0,CW-1

If you use a name other than ISS, such as Zarya, then substitute that so SATPC32 will know what you mean.

These new ARISSat modes will appear along with all the "real" ISS modes. The FM frequencies should be good, and the SSB modes as usual will need a little tweaking. Assuming your rig is calibrated, you should be at least close enough to hear the short transmit periods.

[ANS thanks Alan, WA4SCA for the above information]

/EX

SB SAT @ AMSAT $ANS-100.03
AMSAT at National Air and Space Museum's Space Day

AMSAT News Service Bulletin 100.03
From AMSAT HQ SILVER SPRING, MD.
April 10, 2011
To All RADIO AMATEURS
BID: $ANS-100.03

Dave Taylor, W8AAS says that, "The Smithsonian National Air and Space Museum has invited AMSAT to organize displays and activities at Space Day to be held on Saturday, 7 May from 10:30 to 3:00 at the Air & Space Museum on the National Mall."

Dave would like to hear from anyone who has space-related amateur radio

artifacts, posters, activities or anything else they'd like to display. Also needed volunteers who can staff our tables (either all day or any part), help with setup and tear down, and various other tasks.

There are always lots of interesting exhibits to visit and visitors to talk with, so attending is fun and it helps promote ham radio.

ARISS will have various flight-type hardware on hand and also expects a radio contact with ISS.

To sign up contact Dave via e-mail: w8aas@amsat.org

[ANS thanks Dave Taylor, W8AAS for the above information]

/EX

SB SAT @ AMSAT $ANS-100.04
Satellite Shorts From All Over

AMSAT News Service Bulletin 100.04
From AMSAT HQ SILVER SPRING, MD.
April 10, 2011
To All RADIO AMATEURS
BID: $ANS-100.04

2011 AMSAT Space Symposium Announced

The 2011 AMSAT Space Symposium and Annual Meeting will be held in San Jose, CA at the Wyndham San Jose Nov 4th - 6th, 2011. The AMSAT Board meeting will be at the same hotel on Thursday and Fri-

day 3 & 4 November. The hotel rate will be $79 +taxes and offers free Wi Fi, parking and airport shuttle. Mark your calendars and plan to attend this exciting and informative event.

Thanks,
Gould, WA4SXM

K5OE Plans Maritime Mobile FM Satellite Operation This Week

Jerry, K5OE will operate on the FM amateur radio satellites while maritime mobile aboard the Carnival Ecstasy from late on 11-April till early on 16 April (CDT).

Jerry writes, "This is a family holiday but I will work as many FM satellite passes as our hectic schedule allows. This trip crosses grids between Galveston and Yucatan/Cozumel and I expect to be the most active on 12 April and 15 April (days at sea). Per IARP rules I will be signing HP/K5OE/MM while at sea and XE/K5OE/P while in Mexico."

No QSLs are needed: Just send Jerry an email request with your QSO date/time and he will confirm and send a QSL. Please wait until 18 April to send requests for a QSL card to (k5oe at amsat dot org).

Jerry notes special thanks are in order for Allen, N5AFV, for his excellent, detailed how-to guides: http://www.qsl.net/n5afv/cruise.html and to the AO-51 command team for leaving AO-51 in mode V/U.

Hudson Valley Net

To all,
The next "HV Satcom"Net is Thursday April 14 (8PM; EDT;
- 4 UTC)on the 146.97 MHz. repeater, w an echolink node
of "N2EYH-L" (Repeater Pl;100 - 600 to Xmit), & all wel-
come!
More info :www.hvsatcom.org (E-Mail:wa2aqh@amsat.org)
or (Mt.Beacon ARC: www.wr2abb.org/home/
73,.Stu (WA2BSS)(Director;MBARC)

N4S Special Event Station from Puerto Rico

Angel L Santana-Diaz, WP3GW announced a Special Events station N4S operating from Puerto Rico to commemorate the 50 years of the First Man in Space: Russian pilot Yuri Gagarin who in April 12, 1961 was the first human being to go into space on an 108 minute flight, and the first flight of the Space Shuttle Columbia Sunday morning on April 12th, 1981, known as mission STS-1, opening what is called the Shuttle era.

The Special Event callsign N4S will be on the air to remember these two events: one which changed the course of history, and the other helped expand our knowledge of the space sciences and in the construction of the International Space Station (ISS).

The Special Event will be active on the HF bands from 10 to 80 meters on SSB. The KP4IA-R (145.370 Mhz) and the simplex frequency 147.480 Mhz will be used for local contacts in Puerto Rico. A special electronic certificate will be issued for this occasion. For information go to http://www.qrz.com/db/wp3gw or write to wp3gw@arrl.net

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KAZAKHSTAN, SPECIAL EVENT STATIONS
50 years of manned spaceflight is the 50th anniversary of the first flight of Yuri Gagarin. Besides of other events (contest, awards, etc) there will be two special event stations active from the cosmodrome in Baikonur. R50YG (Yuri Gagarin) and R50SK (Sergej Korolev) will be QRV from Apr 6-14. Both stations will take part in the "Gagarin Cup 2011" contest and count as an additional multiplier in this contest. Furthermore there will be also the special callsign R50KEDR (KEDR was the callsign of Yuri Gagarin during his flight) activated from the launch site of Yuri Gagarin on Apr 12 from 0507 until 0655 UTC. This is the same time like the 108 minutes of Gagarin's first flight.

[ANS thanks the DXNL DX Newsletter, Issue 1722 - Apr 6, 2011
for the Russian Special Event Station information]

[ANS thanks everyone for all of the above information]

/EX

SB SAT @ AMSAT $ANS-100.05
ARISS Recent School Contacts

AMSAT News Service Bulletin 100.05
>From AMSAT HQ SILVER SPRING, MD.
April 10, 2011
To All RADIO AMATEURS
BID: $ANS-100.05

Amateur Radio on the International
Space Station (ARISS) Status Report April 4, 2011

1. Recent ARISS Contacts

Lehman High School in Kyle, Texas participated in an ARISS contact with ISS astronaut Cady Coleman, KC5ZTH on Tuesday, March 29. Students researched and studied the topic of space travel to prepare their questions and were able to get 13 answered before the ISS went over the horizon. The students used the high school's own satellite tracking station for the contact. MyFOXAustin.com posted a story on the event:
http://www.myfoxaustin.com/dpp/top_stories/Lehman-HS-Students-Tal-to-Astronauts-20110329-ktbcw

On Wednesday, March 30, students from Canterbury High School, Ottawa, Ontario, Canada took part in an ARISS contact with astronaut Paolo Nespoli, IZ0JPA on the ISS. Approximately 450 students and administrators attended the event and listened as Nespoli handled 10 questions from the students. The contact was included in the Grades 9 and 10 curricula covering Earth and Space Science, Scientific Investigation Skills

and Career Exploration. The Ottawa Citizen ran an article on the contact.
http://www.ottawacitizen.com/technology/Canterbury+students+enjoy+this+world+conversation/4533084/story.html

An ARISS contact was held on Saturday, April 2 between on-orbit astronaut Paolo Nespoli, IZ0JPA and students from Istituto Tecnico Industriale Statale

"Leonardo da Vinci" and Istituto Comprensivo Scolastico "G. Tedeschi," Pratola Peligna, Italy. Students from both schools posed 23 questions to the astronaut over two ISS passes. The contact highlighted the telecommunications curriculum, and was supported by local radio amateurs. The event was attended by over 100 people including regional and local media representatives.

2. ARRL Covers Ham Astronauts

The American Radio Relay League (ARRL) posted a story in its March 31 ARRL Letter about two astronauts who recently earned their ham licenses.

"Two Astronauts Get Their Ham Ticket" may be found here:
http://www.arrl.org/news/two-astronauts-get-their-ham-ticket

3. AMSAT Posts News on ARISSat, Hamvention

On April 3, AMSAT (Radio Amateur Satellite Corporation) posted ARISS-related items in its News Service bulletin (ANS-093). The first story covered the anticipated activation of ARISSat-1 which will occur over April 11 - 13 in celebration of the 50th anniversary of Yuri Gagarin's first space flight.

Another story was about the upcoming Dayton Hamvention on May 20 - 22 which will feature an ARISSat prototype and will be attended by astronaut Doug Wheelock.
See: http://amsat.org/pipermail/ans/2011/000498.html

4. NASA Article on ARISS Telebridge Station

NASA wrote an article about Sacred Hearts Academy, an all-girls school in Hawaii that has a telebridge station which can be used to link schools with the ISS astronauts during ARISS contacts. ARISS members Dick Flagg and Nancy Rocheleau were interviewed for the story that talks about ARISS and other NASA programs in which the girls are involved. The story, "A Heart-to-Heart Talk" has been posted to the NASA web site. See:
http://www.nasa.gov/audience/foreducators/a-heart-to-heart-talk_prt.htm

[ANS thanks Carol, KB3LKI, for the above information]

/EX

SB SAT @ AMSAT $ANS-100.06
AMSAT Awards

AMSAT News Service Bulletin 100.06
From AMSAT HQ SILVER SPRING, MD.
April 10, 2011
To All RADIO AMATEURS
BID: $ANS-100.06

AMSAT Awards

AMSAT Director Contests and Awards, Bruce Paige, KK5DO says that
congratulations are in order for the AMSAT Awards issued in the
last month or so.

The following have entered into the Satellite Communicators Club for
making their first satellite QSO:

Joseph Patrick, K4XZ
Scott Rights, N6PG
Dave McFadden, VE3ECV
Rene Bourrassa, VE2SUD
Paul-Ernest Plante, VE2DBX
Joe Lemieux, VE3EUS
Claudio Ferrari, IK1YRC
Robert Foster, KD0JLN

The following have earned the AMSAT Communications Achievement Award:

Branko Martincic, 9A3ST #533
Pozdrawiam Mariusz, SQ9MES #534

The following have earned the AMSAT Sexagesimal Award:
Gerry Krebs, N0JE #159

The following have earned the AMSAT Century Award:
Doug Papay, KD8CAO #41

The following have earned the South Africa Satellite Communications
Achievement award:
Branko Martincic, 9A3ST #US165

The following have earned their Robert W. Barbee Jr., W4AMI Award.

Jim Bennett, KE4KOL #68
Loren Rasmussen, K7CWQ #69
Jim Adams, K0BAM #70
Bill Dzurilla, NZ5N #71

To see all the awards visit http://www.amsat.org.

[ANS thanks Bruce Paige, KK5DO for the above information]

/EX

SB SAT @ AMSAT $ANS-100.07
New OSCAR Numbers

AMSAT News Service Bulletin 100.07
From AMSAT HQ SILVER SPRING, MD.
April 10, 2011
To All RADIO AMATEURS
BID: $ANS-100.07

University of Texas FASTRAC Satellites Receive OSCAR Numbers

OSCAR Number Administrator, William A. (Bill) Tynan, W3XO issued this notice in regards to OSCAR number assignment to the two University of Texas FASTRAC satellites.

"I have received word from Thomas M Campbel through Andy MacAllister, W5ACM that the two FASTRAC satellites developed by the University of Texas Satellite Design Laboratory, Department of Aerospace Engineering and Engineering Mechanics Department have been confirmed as separated and functioning. Further, I am informed by Drew Glasbrenner, KO4MA, that these two spacecraft have been coordinated through IARU and meet the other requirements for issuance of OSCAR numbers.

Therefore I congratulate Sebastian Mu&#65533;oz Toro and all on the FASTRAC team for building testing and launching these two satellites; and by the authority vested in me by the AMSAT-NA President, I hereby issue FASTRAC OSCAR-69 or FO-69 to FASTRAC 1 and FASTRAC OSCAR-70 to FASTRAC 2.

AMSAT-NA is pleased to welcome FO-69 and FO-70 into the family of Amateur
Radio satellites. We are hopeful that they will fulfill their intended mission of furthering education and increasing interest in the Amateur Radio space program."

73 and best wishes,

William A. (Bill) Tynan, W3XO
OSCAR Number Administrator

[ANS thanks Bill Tynan, W3XO for the above information]

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In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Dee Interdonato, NB2F

55. Weekly Highlights of Solar and Geomagnetic Activity, 04 - 10 April 2011

Newsgroup: rec.radio.amateur.space
Date: 2011-04-12 21:30:06 UTC
From: SWPC.Webmaster@noaa.gov
Message-ID: <20110412213001.CEA6333C6C@panix2.panix.com>
Source record: 481
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.info

```
:Product: Weekly Highlights and Forecasts
:Issued: 2011 Apr 12 1823 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
# Weekly Highlights and Forecasts
#
Highlights of Solar and Geomagnetic Activity
04 - 10 April 2011

Solar activity was low. Three C-class events were observed on 06 and
07 April from the East Limb. On 08 April, Region 1185 (N23, L=033,
class/area Cso/100 on 05 April) was redefined as two distinct
groups, the second of which was designated Region 1189 (N23, L=033,
class/area Dso/040 on 08 April). Six regions, numbered 1184 through
1189, populated the visible disk by the end of the period. Of those,
Region 1184 (N17, L=110, class/area Dso/170 on 04 April) was the
largest. The remaining regions were small B or C type groups with
simple Beta magnetic characteristics. While x-ray activity was low,
several CMEs were observed during the period. The first CME launched
at 02/2347 UTC from Region 1176 (S15, L=200, class/area Eko/490 on
23 March). Additional CMEs were observed on 04 April, including one
from the northeast limb at 04/0509 UTC associated with a long
duration B-class flare. Two more CMEs were observed on 07 April. The
first originated from an active filament channel on the southeast
limb and was observed in SOHO/LASCO C3 imagery at 07/0754 UTC. The
second, seen at 07/1042 UTC, was thought to originate from old
Region 1176 which had rotated around the west limb on 04 April.
Finally, a slow partial halo CME was observed in SOHO/LASCO C2
imagery at 09/0024UTC.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at
high levels from 04 - 06 April. Moderate levels were observed
throughout the rest of the period.

Geomagnetic field activity ranged from quiet to major storm levels.
The period began at unsettled to active levels in the midst of a
coronal hole high speed stream (CH HSS). The CME observed at 02/2347
UTC arrived at the ACE spacecraft at approximately 06/0854 UTC. A
sudden impulse of 24 nT was observed at Boulder at 06/0942 UTC.
Solar wind speeds at ACE jumped from 494 to 559 km/s, then climbed
```

to a peak of 591 km/s at 06/1700 UTC. The Interplanetary Magnetic Field (IMF Bt) initially rose from +07 to +14 nT following the shock and peaked at +17 nT at 06/1030 UTC. The IMF Bz turned southward following shock passage and remained mostly southward until approximately 06/2000 UTC. A maximum southward deflection of -11 nT was observed at 06/1213 UTC. The geomagnetic field was at quiet to unsettled levels in the days prior to the CME arrival (04 - 06 April). Activity increased to unsettled to major storm levels once the CME arrived. Active to minor storm levels were recorded at Boulder and minor to major storm levels detected at high latitudes. Activity decreased to mostly unsettled levels after 06/1800 UTC as Bt decreased and Bz became variable at +03 to -03 nT. Geomagnetic activity returned to quiet to unsettled levels for the remainder of the week.

Forecast of Solar and Geomagnetic Activity
13 April - 09 May 2011

Solar activity is expected to be at predominantly low levels for the entire period, with a slight chance for an M-class event when old Region 1176 returns on 17 April.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to begin the period at high levels following the increased windspeeds associated with the CH HSS. A return to normal to moderate levels is expected from 17 April until 01 May. High levels are expected to return from 02 - 05 May following a second CH HSS. Normal to moderate levels are expected for the remainder of the period.

Geomagnetic field activity is expected to be at predominantly quiet levels from 12 April until a CH HSS arrives on 17 April. Three days of unsettled to active conditions are anticipated, with a return to mostly quiet conditions on 20 April. Quiet to unsettled conditions with isolated active and minor storm periods are expected from 28 April - 01 May due to a second recurrent CH HSS becoming geoeffective. Quiet conditions are expected to return and persist until 07 May. Unsettled to active conditions with a chance for isolated minor storm periods are expected from 08 - 09 May as a third CH HSS rotates into a geoeffective position.

56. HOT FOR TENAGERS

Newsgroup: rec.radio.amateur.space
Date: 2011-04-13 17:37:53 UTC
From: devi <satyamsivam9030@gmail.com>
Message-ID: <f8f18806-870a-471c-929c-d87f798cc4ac@17g2000prr.googlegroups.com>
Source record: 482

hot lipkiss
http://hotactressstoyou.blogspot.com/2011/04/lipkiss-2.html
lipkiss in without dress
http://hotactressstoyou.blogspot.com/2011/04/lipkiss.html
seepika padukone sexy back look
http://hotactressstoyou.blogspot.com/2011/04/deepika-padukone.html
sexy katrina kaif
http://hotactressstoyou.blogspot.com/2011/04/katrina-kaif.html
beauty keerthi chawla
http://hotactressstoyou.blogspot.com/2011/04/keerthi-chawla.html
saloni sexy photos
http://hotactressstoyou.blogspot.com/2011/04/saloni.html
deeksha seth in a hot saree
http://hotactressstoyou.blogspot.com/2011/04/deeksha-seth.html
asin hot wallpapers
http://hotactressstoyou.blogspot.com/2011/04/asin.html
ramba in a red dress
http://hotactressstoyou.blogspot.com/2011/04/ramba.html
sexy ilieana is in scert
http://hotactressstoyou.blogspot.com/2011/04/ileana.html

57. WSR-103 AMSAT Weekly Satellite Report

Newsgroup: rec.radio.amateur.space
Date: 2011-04-13 23:51:19 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <003601cbfa35$a340ba50$e9c22ef0$@net>
Source record: 483
Cross-posted to: rec.radio.amateur.space,rec.radio.info

```
This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-103.S1
WSR 103 Part 1 04/13/2011

AMSAT NEWS SERVICE BULLETIN 103.S1
FROM AMSAT HQ SILVER SPRING, MD, April 13, 2011
TO ALL RADIO AMATEURS
BID: $WSR-103.S1

HO-68 HOPE-1 (CAS-1)(XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009 0231z
Launch site: Taiyuan Space Center, PRC

Status: By schedule

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
145.9250 - 145.9750 MHz SSB/CW
145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
435.7650 - 435.7150 MHz SSB/CW
435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://
[02092011]
=====
SO-67 SumbandilaSat
```

Catalog Number: 35870
Launch Date: September 17, 2009 1555z
Launch site: Baikonur, Kazakhstan

Status: By schedule

Callsign: ZS0SUM

Uplink: 145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/
[02092011]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[02092011]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05, 2005 0444z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.9360 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[02092011]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004 0745z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode(s):
Voice repeater: V/u
Uplink: 145.880 MHz FM
Downlink: 435.300 MHz FM

Telemetry: By Command ONLY
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.880 MHz FM
145.920 MHz FM
145.920 MHz FM - 67 Hz PL tone burst
1268.705 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.703 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[03292011]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002 1700z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4
Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the re-
peater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
the 10 minute timer.
[02092011]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993 0140z
Launch site: Kourou, French Guiana

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[02092011]
=====
AO-7 AMSAT OSCAR 7

Catalog number: 07530
Launch Date: November 15, 1974
Launch site: Vandenberg AFB, California, USA

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
145.972 MHz CW
435.100 MHz CW
2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02092011]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
Kourou, French Guiana
Uchinoura Space Center, Japan
Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - OFF
APRS - OFF
SSTV - OFF

Expedition 27 Crew:
Commander: Dmitry Kondratyev
Flight Engineer: Catherine Coleman KC5ZTH
Flight Engineer: Paolo Nespoli IZ0JPA

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM

Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[03212011]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-103.S2
WSR 103 Part 2 04/13/2011

AMSAT NEWS SERVICE BULLETIN 103.S2
FROM AMSAT HQ SILVER SPRING, MD, April 13, 2011
TO ALL RADIO AMATEURS
BID: $WSR-103.S2

O/OREOS
Catalog Number: 37224
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.035 MHZ AX.25

Beacon:

Callsign:

URL: http://www.ooreos.org/
[02092011]
=====
Rax-1 Radio Aurora Explorer
Catalog Number: 37223
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.505 MHz 9k6 GMSK

Beacon:

Callsign: RAX-1

URL: http://rax.engin.umich.edu/
[02092011]
=====
Fastrac-1 Sara Lily
Catalog Number: 37225
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On orbit

Uplink 1: 145.980 MHz 1k2 baud
Uplink 2: 145.825 MHz 1k2 baud
Downlink: 437.345 MHz 1k2 and 8k6 baud

Beacon: 437.435 MHz 1k2 AX.25

Callsign: Fast1

URL: http://fastrac.ae.utexas.edu/index.php
[02092011]
=====
Fastrac-2 Emma
Catalog Number: 37227
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink 1: 435.025 MHz 1k2 baud
Uplink 2: 437.435 MHz 9k6 baud
Downlink: 145.825 MHz

Beacon: 145.825 MHz 1k2 AX.25

Callsign: Fast2

URL: http://fastrac.ae.utexas.edu/index.php
[02092011]
=====
StudSat
Catalog Number: 36796
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink: 437.505MHz, 9600bps FSK
Downlink: 437.505MHz, 9600bps FSK
Beacon : 437.505MHz, 20bps ASK
[02092011]
=====
TIsat-1
Catalog Number: 36799
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On orbit

Callsign: HB9DE

Uplink: 145.980MHz FM, AFSK
Downlink: 437.305MHz FM, AFSK
Beacon: 437.305MHz CW
[02092011]
=====
HO-68 HOPE-1 (CAS-1)(XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009 0231z
Launch site: Taiyuan Space Center, PRC

Status: By schedule

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
145.9250 - 145.9750 MHz SSB/CW
145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
435.7650 - 435.7150 MHz SSB/CW
435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://
[02092011]

=====
SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w): 437.5050MHz FSK 1k2bps
[02092011]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
437.3850 MHz FSK 9k6bps
[02092011]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps
[02092011]
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
Beacon(500mw): 436.000MHz GMSK 9k6bps
[02092011]
=====
CP-6
Catalog Number: 35003
Launch Date: May 19, 2009 2355z

Launch site: Wallops Island, Virginia, USA

Status: Operational

Downlink: 437.365 MHz 1k2 AFSK
[02092011]
=====
HAWKSAT 1
Catalog number: 35004
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: operational

Downlink: 437.345 MHz ?
[02092011]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: Operational

Downlink: 437.465 MHz 1k2 AFSK
[02092011]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009 0115z
Launch Site: Satish Dhawan Space Centre, India

Status: ?

Downlink: 435.000 MHz
Uplink: 145.800 MHz

Telemetry: 137.400 MHz
[02092011]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon: 437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[02092011]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: In Orbit

Downlink: 437.375 MHZ FSK9k6/CW
Beacon: 437.375 MHz FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[02092011]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
437.465 MHz FM/CW
Beacons: 437.305 MHz FM/CW
437.275 MHz FM/CW

Callsigns: JR5YBN
JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[02092011]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Downlink: 437.455 MHz AFSK/CW
Beacon: 437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[20092011]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon: 437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[02092011]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008 1520z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Curent Modes: Telemetry
Audio
Images

Downlinks: 435.315 MHz
435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02092011]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web
page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[02092011]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[02092011]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Digipeater

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL
=/satellites/status.php
[02092011]
=====
Compass-1

Catalog number: 32787
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Current Mode: 4k8 MSK packet

Uplink: 145.980 MHz FM
Downlink: 437.275 Mhz CW
437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[02092011]
=====
CO-66 Seeds II
Catalog number:
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web
page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL
=/satellites/status.php
[02092011]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[02092011]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[02092011]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005 0652z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[02092011]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: ?????

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[02092011]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004 0745z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode(s):
Voice repeater: V/u
Uplink: 145.880 MHz FM
Downlink: 435.300 MHz FM

Telemetry:
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.880 MHz FM
145.920 MHz FM
145.920 MHz FM - 67 Hz PL tone burst
1268.700 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.708 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[032992011]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[02252011]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Current Mode: CW downlink worldwide
AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php
[02092011]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001 0240z
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[02092011]
=====
RS-22 RADIO SPORT 22 (MOZHAYETS 4)
Catalog number: 27939
Launch Date: September 27, 2003 0612z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02092011]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990
Launch site: Kourou, French Guiana

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
145.860 MHz 1200-baud Manchester FSK
145.880 MHz 1200-baud Manchester FSK
145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[02092011]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984
Launch site: Vandenburg AFB, California, USA

Status: Operational

Current Mode: /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz

Mode-S Beacon: 2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[02092011]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
Kourou, French Guiana
Uchinoura Space Center, Japan
Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - OFF
APRS - OFF
SSTV - OFF

Expedition 27 Crew:
Commander: Dmitry Kondratyev
Flight Engineer: Catherine Coleman KC5ZTH
Flight Engineer: Paolo Nespoli IZ0JPA

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear

U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[03212011]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-103.S3
WSR 103 Part 3 04/13/2011

AMSAT NEWS SERVICE BULLETIN 103.S3
FROM AMSAT HQ SILVER SPRING, MD, April 13, 2011
TO ALL RADIO AMATEURS
BID: $WSR-103.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NANOSAIL-D
Catalog Number:
Ejection Date: January 17, 2011

Status: On orbit

Downlink: 437.270 MHz AX.25

URL: http://nanosaild.engr.scu.edu/dashboard.htm
[01272011]
=====
CP4
Catalog Number: 31132
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[09062010]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[09062010]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[09062010]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.250

Official Website: http://www.ncube.no
[09062010]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink 2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[09062010]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[09062010]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====

MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks: 145.850 MHz
145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545

Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks

V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON General Beacon(GB) Middle Beacon(MB) Engineering Beacon(EB)
2 m none 145.898 MHz none
70cm 435.438 MHz 435.588 MHz 435.838 MHz
13cm(1) 2400.188 MHz 2400.338 MHz 2400.588 MHz
13cm(2) 2401.173 MHz 2401.323 MHz 2401.573 MHz
3cm 10450.975 MHz 10451.125 MHz 10451.375 MHz
1.5cm 24047.885 MHz 24048.035 MHz 24048.285 MHz
[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK

[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
145.890 FM
145.930 FM
1269.700 FM
1269.800 FM
1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[07172010]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink: 435.1380 MHz AFSK 1200 BPS
Downlink: 435.2060 MHz AFSK 1200 BPS
Uplink: 145.8150 MHz AFSK 1200 BPS
Uplink: 145.8350 MHz AFSK 1200 BPS
Uplink: 145.8550 MHz AFSK 1200 BPS
Uplink: 145.8750 MHz AFSK 1200 BPS
[06042009]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Non-operational
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
145.870 MHz FM
145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[11062010]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks: 145.875 MHz FM 1200-baud
145.900 MHz FM 1200-baud
145.925 MHz FM 1200-baud
145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink: 435.0625 MHz FM 1k2bps AFSK
435.1125 MHz FM 1k2bps AFSK
435.1375 MHz FM 1k2bps AFSK

Downlink: 145.9750 MHz FM 1k2bps AFSK
2446.5025 MHz FM 1k2bps AFSK

Beacon: 2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink: 435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons: 435.795 MHz CW
435.910 MHz AX25

Voice Transponder:
Uplink: 145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks: 145.850 MHz
145.870 MHz
145.890 MHz
145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode: V/u

Uplink: 145.900 MHz FM 1200-baud Manchester FSK (reserved)
145.920 MHz FM VOICE
145.940 MHz FM 1200-baud Manchester FSK (reserved)
145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink: 437.026 MHz USB VOICE
(1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
PSK 437.026 MHz LHCP

V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink: 145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink: 145.8500 MHz MFSK 1200 BPS
Uplink: 145.8700 MHz MFSK 1200 BPS
Uplink: 145.8900 MHz MFSK 1200 BPS
Uplink: 145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.8500 - 145.9000 MHz SSB/CW
Downlink 29.4000 - 29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink: 29.4500 - 29.5500 MHz SSB/CW
Beacons: 29.450 MHz
435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
29.4500 MHz CW
[01152007]
=====
OSCAR III

Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink: 145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB

Beacon 1: 29.352 MHz (intermittent)
Beacon 2: 29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-103.S4
WSR 103 Part 4 04/13/2011

AMSAT NEWS SERVICE BULLETIN 103.S4
FROM AMSAT HQ SILVER SPRING, MD, April 13, 2011
TO ALL RADIO AMATEURS
BID: $WSR-103.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Re-entered
Re-entered: October 25, 2009

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[09062010]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 437.325 MHz 9k6 GMSK
437.325 MHz CW 20wpm
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 436.250 MHz 9k6 FHSS
[11112009]
=====
Pollux
Catalog Number: 35693
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25
[09062010]
=====
Castor (ANDE-2)
Catalog Number: 35694
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25
[09062010]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Re-Entered
Re-entered date: August 8, 2010

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[08082010]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA

850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at}
amsat.org
NNNN
/EX

58. ANS-107 AMSAT News Service Weekly Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2011-04-17 01:14:22 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <001701cbfc9c$c2f11bb0$48d35310$@net>
Source record: 484
Cross-posted to: rec.radio.amateur.space,rec.radio.info

AMSAT NEWS SERVICE
ANS-107

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* Come See AMSAT at Dayton Hamvention 2011
* Satellite Grid Opportunities From Mexico
* UK Marconi Day Special Events Station Plans Satellite Operation
* AO-51 Operational Again After Short Glitch
* Reminder: AMSAT at National Air and Space Museum's Space Day
* AMSAT France Disbands
* Satellite Shorts From All Over

SB SAT @ AMSAT $ANS-107.01
Come See AMSAT at Dayton Hamvention 2011

AMSAT News Service Bulletin 107.01
>From AMSAT HQ SILVER SPRING, MD.
April 17, 2011
To All RADIO AMATEURS
BID: $ANS-107.01

The 2011 Dayton Hamvention will be held this year May 20-22. AMSAT will have new hats, golf shirts and tee shirts. Also featured will be a free "gift" with every new or renewing membership.

This year featured AMSAT attractions include:

+ Operational ARISSat-1 Prototype
+ Astronaut Doug Wheelock, KF5BOC, will be attending as a special guest of the ARRL and AMSAT. Doug will visit the AMSAT booth on both Friday and Saturday.
+ AMSAT theme for 2011 is "Providing Education Through Amateur Satellites"

Check out AMSAT's Hamvention posted at ...
http://www.amsat.org/amsat-new/hamvention/2011/Dayton.php

for the latest events:

+ AMSAT theme for 2011 is "Providing Education Through Amateur Satellites"

+ ARISSat-1

+ AMSAT Thursday Night Get-together

+ AMSAT Forum

+ AMSAT/TAPR Banquet

This is the 60th year of the Dayton Hamvention, sponsored by DARA (Dayton Amateur Radio Association). As has been the case for the many years the Hamvention will be at the Hara Arena Complex on the north side of Dayton. Further information on Hamvention 2011, including advance ticket sales and motel accommodations, can be found at http://www.hamvention.org.

AMSAT will occupy the same booths (444-449) in Ball Arena, right across from the ARRL area and just inside the door from the Satellite Demonstration area. Plan to visit all of the AMSAT activities!

AMSAT/TAPR Banquet

The fifth annual AMSAT/TAPR Banquet will be Friday night May 20 at the Kohler Presidental Banquet Center. The Banquet speaker will be David Rowe, VK5DGR talking on The Village Telco. Additional information about the talk can be found on the AMSAT Web site, 2011 Hamvention, Banquet page.

Seating is limited and reservations are required. Go to the Dayton Banquet 2011 link:
http://www.amsat.org/amsat-new/hamvention/2011/Banquet.php to find information about reservations and additional information.

AMSAT Hotel

The AMSAT block of rooms at the Fairborn Country Inn & Suites are now closed. Please make your own accommdations for Hamvention 2011.

[ANS thanks Gould Smith, WA4SXM for the above information]

/EX

SB SAT @ AMSAT $ANS-107.02
Satellite Grid Opportunities From Mexico

AMSAT News Service Bulletin 107.02
>From AMSAT HQ SILVER SPRING, MD.
April 17, 2011
To All RADIO AMATEURS
BID: $ANS-107.02

David XE3DX recently posted that he will be operating from
EK08, EK09, EK18 and EK19 from April 17th to the 30th.
These are grids that you don't hear very often so if you
are chasing grids, be on the lookout and please give David some
room. Also heard on AO-51 from EK18 was XE1SOV.

David uses LOTW, so if you make a contact you'll be able to get
confirmation without sending for a card. If he doesn't get your
call right, there will be no match in LOTW.

[ANS thanks David XE3DX and John K8YSE for the above information]

/EX

SB SAT @ AMSAT $ANS-107.03
UK Marconi Day Special Events Station Plans Satellite Operation

AMSAT News Service Bulletin 107.03
>From AMSAT HQ SILVER SPRING, MD.
April 17, 2011
To All RADIO AMATEURS
BID: $ANS-107.03

On Saturday, April 30, 2011 two members of the Barry Amateur Radio
Society, South Wales, UK will be activating a Marconi Day Internation-
al Special Event Station from Flatholm Island located in the Bristol
Channel. They plan to operate on many of the HF bands and amateur satel-
lites when access is possible. They will be using the club callsign
GB4MBC. Operation from Flatholm Island is subject to weather for landing.
Additional information will be posted at QRZ.com.

[ANS thanks Ken Eaton, GW1FKY for the above information]

/EX

SB SAT @ AMSAT $ANS-107.04
AO-51 Operational Again After Short Glitch

AMSAT News Service Bulletin 107.04
>From AMSAT HQ SILVER SPRING, MD.
April 17, 2011
To All RADIO AMATEURS
BID: $ANS-107.04

This week the AO-51 Command Team received reports that AO-51 was down.
Mark N8MH, AO-51 Command Station noted, "Eclipses are still getting longer,
and the sun angle is getting worse too. It probably has experienced a low
battery trip." The AO-51 Command Team requests that users post their oper-
ational information on the OSCAR Status Page: http://oscar.dcarr.org/

The good news was that AO-51 resumed operation in time for Steve, KJ4FEL
to make his first satellite contact. Steve wrote, "AO-51 was working fine
for the 2158Z, 4-13-2011 pass over my QTH (EM95md) during which I made my
FIRST successful satellite QSO ever with K8YSE. Thank You K8YSE!!"

Heard from Mark, N8MH, "People like you are the reason that Drew KO4MA and
I dropped what we were doing to run home from work early today to turn AO-51

back on. We're happy to hear about your first QSO! Congrats."

Keep up with the latest AO-51 Control Team News on-line at:
http://www.amsat.org/amsat-new/echo/CTNews.php

[ANS thanks Mark, N8MH for the above information]

/EX

SB SAT @ AMSAT $ANS-107.05
Reminder: AMSAT at National Air and Space Museum's Space Day

AMSAT News Service Bulletin 107.05
>From AMSAT HQ SILVER SPRING, MD.
April 17, 2011
To All RADIO AMATEURS
BID: $ANS-107.05

Dave Taylor, W8AAS says that, "The Smithsonian National Air and Space
Museum has invited AMSAT to organize displays and activities at Space
Day to be held on Saturday, 7 May from 10:30 to 3:00 at the Air & Space
Museum on the National Mall."

Dave would like to hear from anyone who has space-related amateur radio
artifacts, posters, activities or anything else they'd like to display.
Also needed volunteers who can staff our tables (either all day or any
part), help with setup and tear down, and various other tasks.

There are always lots of interesting exhibits to visit and visitors to
talk with, so attending is fun and it helps promote ham radio.

ARISS will have various flight-type hardware on hand and also expects
a radio contact with ISS.

To sign up contact Dave via e-mail: w8aas@amsat.org

[ANS thanks Dave Taylor, W8AAS for the above information]

/EX

SB SAT @ AMSAT $ANS-107.06
AMSAT France Disbands

AMSAT News Service Bulletin 107.06
>From AMSAT HQ SILVER SPRING, MD.
April 17, 2011
To All RADIO AMATEURS
BID: $ANS-107.06

Reports have been received that AMSAT France appears to have disbanded.
According to a notice published in France URC News on Monday April 11th,
21 leaders present at an Extraordinary General Assembly of AMSAT France
voted over the weekend of April 9th to dissolve the organization.

The actual vote is reported as 11 votes in favor of going out of business and 10 in favor of continuing. A short news release gave no reason for this decision. The original press release, in French is on line at: http://tinyurl.com/3spvx6l.

[ANS thanks the URC News Site for the above information]

/EX

SB SAT @ AMSAT $ANS-107.07
Satellite Shorts From All Over

AMSAT News Service Bulletin 107.07
>From AMSAT HQ SILVER SPRING, MD.
April 17, 2011
To All RADIO AMATEURS
BID: $ANS-107.07

+ William Shatner narrates a look back at how the idea for the space shuttle was born; it also details what needs to happen for a space shuttle mission to take place. Watch the video at: http://www.universetoday.com/84875/captain-kirk-and-the-space-shuttle/

+ NASA has a downloadable poster showing Fun Facts About the Space Shuttle Orbiters posted at: http://tinyurl.com/6kblwea

+ Technical papers are solicited for presentation at the 30th Annual ARRL and TAPR Digital Communications Conference to be held September 16-18, 2011 in Baltimore, Maryland. These papers will also be published in the Conference Proceedings (you do NOT need to attend the conference to have your paper included in the Proceedings). The submission deadline is July 31, 2011. Please send papers to: Maty Weinberg, ARRL, 225 Main St, Newington, CT 06111. You can make your submission via e-mail to: maty@arrl.org

+ Luis, LU6QI continues to report stretching the AO-7 footprint with a DX contact with Bob, N3LL in SSB Mode B on April 5, 2011, covering a distance of 6914.6 km. Luis also contacted Adrian ZF8/ZF2AE a few days before, covering more than 6000 km. Luis wrote, "I am QRV for other stations who would like to attempt a QSO either in SSB or CW. My grid locator is FF66TQ. My mail is lu6quintas@gmail.com".

+ Hams like science so you will be interested in learning some quick facts about NASA's next-generation space telescope. NASA has created a short video to show you just how literally "cool" the James Webb Space Telescope really is. In a 4 minute video produced at NASA's Goddard Space Flight Center in Greenbelt, Md., astrophysicist Amber Straughn takes you on a quick journey of facts and images to explain what the Webb will tell us about the cosmos. Watch the video at: http://tinyurl.com/3ze2ulq (Spacedaily.com)

+ The 2011 AMSAT Space Symposium and Annual Meeting will be held November 4-6 at the Wyndham San Jose in San Jose, California. The AMSAT Board meeting will be at the same hotel on Thursday and Friday Novem-

ber 3 - 4. A special hotel rate for attendees has been negotiated that includes free WiFi, parking and airport shuttle.

[ANS thanks everyone for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office. And with that keep in mind the ham who was the drummer in an orchestra. When he missed a beat the conductor commented that players who cannot follow notes have their instrument taken away and are given two sticks so they can be the drummer. The drummer was heard mentioning that when you cannot play the drums they take away one of the sticks and make you the conductor.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

59. Weekly Highlights of Solar and Geomagnetic Activity, 11 - 17 April 2011

Newsgroup: rec.radio.amateur.space
Date: 2011-04-19 21:30:06 UTC
From: SWPC.Webmaster@noaa.gov
Message-ID: <20110419213001.C49BF33C5C@panix2.panix.com>
Source record: 485
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.info

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:Product: Weekly Highlights and Forecasts
:Issued: 2011 Apr 19 1900 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
# Weekly Highlights and Forecasts
#
Highlights of Solar and Geomagnetic Activity
11 - 17 April 2011

Solar activity was at low to moderate levels. Low activity occurred
during 11 - 14 April with C-class flares from Regions 1185 (N18,
L=025, class/area Cso/100 on 05 April), 1190 (N13, L=338, class/area
Eki/440 on 16 April), and 1193 (N17, L=266, class/area Eai/430 on 17
April). Activity increased to moderate levels on 15 April due to an
M1/1f flare at 15/1712 UTC from Region 1190 associated with minor
discrete radio emission. Region 1190 showed gradual spot growth
during 12 - 15 April and displayed a beta-gamma magnetic
configuration, then began to gradually decay on 16 April. Region
1193, which also contained a beta-gamma magnetic configuration,
showed gradual spot growth during 13 - 17 April. An Earth-directed
coronal mass ejection was observed early on 15 April, associated
with a filament disappearance from the northeast quadrant late on 14
April. Estimated plane-of-sky velocity was for the CME was 390 km/s,
based on an analysis of SOHO/LASCO coronagraph images. Activity
decreased to low levels during 16 - 17 April with C-class flares
from Regions 1185, 1190, and 1193.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at
normal to moderate levels during 11 - 13 April. Fluxes increased to
moderate to high levels during 14 - 16 April, then decreased to
normal to moderate levels during 16 - 17 April.

Geomagnetic activity was at quiet to active levels on 11 April.
Activity increased to quiet to minor storm levels on 12 April with
major storm periods observed at high latitudes. Activity decreased
to quiet to active levels on 13 April with minor to major storm
periods observed at high latitudes. Activity decreased to quiet to
unsettled levels on 14 April. A further decrease to quiet levels at
all latitudes occurred during 15 - 17 April. ACE solar wind
observations indicated the activity during 11 - 13 April was
```

associated with a coronal hole high-speed stream (CH HSS). The HSS source was an equatorward extension of the southern polar CH. The CH HSS commenced on 11 April following a negative- to positive-polarity solar sector boundary crossing. Velocities increased during 11 - 12 April, eventually reaching a peak of 674 km/s at 12/1940, then gradually decreased during the rest of the period. Interplanetary magnetic field (IMF) changes associated with the onset of the CH HSS included increased Bt (peak 17 nT at 11/2001 UTC) as well as increased Bz variability with intermittent periods of southward Bz (maximum deflection -9 nT at 12/0525 UTC). The CH HSS began to gradually subside on 13 April.

Forecast of Solar and Geomagnetic Activity
20 April - 16 May 2011

Solar activity is expected to be low with C-class flares likely during the period. There will be a chance for moderate activity (isolated M-class flares) during the second half of the period due to the return of previously active regions.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at normal to moderate levels during most of the period. However, high flux levels are expected during 22 - 23 April, 30 April - 03 May, and 11 - 13 May.

Geomagnetic field activity is expected to be to be at quiet to unsettled levels during 20 - 22 April due to weak coronal hole effects on 20 - 21 April and weak coronal mass ejection effects on 22 April (associated with the Earth-directed CME observed on 15 April). Activity is expected to decrease to quiet levels during 23 - 27 April. Field activity is expected to increase to quiet to active levels during 28 April - 01 May due to recurrent coronal hole effects. Activity is expected to decrease to quiet levels during 02 - 07 May. Activity is expected to increase to quiet to active levels during 08 - 11 May due to recurrent coronal hole effects. Quiet conditions are expected during 12 - 16 May.

60. ANS-114 AMSAT News Service Weekly Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2011-04-25 18:09:02 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <001201cc0373$d6720220$83560660$@net>
Source record: 486
Cross-posted to: rec.radio.amateur.space,rec.radio.info

AMSAT NEWS SERVICE
ANS-114

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

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In this edition:
* ARISSat-1 Update
* AO-51 PL Reminder
* AMSAT India April 2011 Newsletter Available
* Ukrainian Hams Lose Allocations Including Some Satellite Bands
* FCC Decision in Favor of ReconRobotics Affects Satellite Frequencies
* Satellite Shorts From All Over
* ARISS Status - 18 April 2011

SB SAT @ AMSAT $ANS-114.01
ARISSat-1 Update

AMSAT News Service Bulletin 114.01
From AMSAT HQ SILVER SPRING, MD.
April 24, 2011
To All RADIO AMATEURS
BID: $ANS-114.01

Lou McFadin, W5DID, ARISS US Hardware Manager, reports that a telecon was recently held the ARISSat team in Russia. Here is the situation as described by them. The Russian suit battery that was intended to be used on ARISSat was used during testing both on the ground and onboard ISS when it first arrived. When it was tested prior to the planned April 12 operation, it was discovered that the battery was low on charge. The suit batteries are specified for only five cycles of charge. It was decided to not recharge the battery at this time in order to keep the number of cycles as low as possible and thus saving the battery for the actual mission. That deployment is currently scheduled for July 26. We are still trying to get more information on the storage status and the battery health from the Russian team. We will keep you informed as we prepare for the eventual deployment of ARISSat.

[ANS thanks Lou, W5DID, for the above information]

/EX

SB SAT @ AMSAT $ANS-114.02
AO-51 PL Reminder

AMSAT News Service Bulletin 114.02
From AMSAT HQ SILVER SPRING, MD.
April 24, 2011
To All RADIO AMATEURS
BID: $ANS-114.02

Mark Hammond, N8MH, provided the following reminder about current AO-51 operations.

As you have noticed, AO-51 has recently experienced a few shutdowns due to a low battery voltage trip. This is because of increasing eclipses (now at 20 minuets per orbit and increasing), poor sun angles (still getting worse), and a "weak" battery.

AO-51 is now using the 67 Hz PL tone required mode in order to turn the transmitter(s) OFF when not in use. The transmitter power is down to about 550 mW. The Command Team will continue adjusting various parameters, including transmitter power, trigger voltages, etc. in order to keep the battery temperatures reasonable. Keep in mind that the power management feature keeps the transmitter(s) OFF during eclipses, so you can't bring it up even with a PL tone while the satellite is in eclipse.

Here is our current schedule, which will continue until further notice:

AO-51 Schedule

Mode V/U FM Voice Repeater (**67 Hz PL tone required**)
Uplink: 145.880 MHz FM (Temporarily from 145.920)
Downlink 435.300 MHz FM

The AO-51 Command Team can use your help!

1-Please make activity reports to: http://oscar.dcarr.org/ This is very useful to all users. Until everyone knows that the 67 Hz tone is required, we might see some conflicting reports.

2-Please help spread the word about needing the 67 Hz tone!

[ANS thanks Mark, N8MH, for the above information]

/EX

SB SAT @ AMSAT $ANS-114.03
AMSAT India April 2011 Newsletter Available

AMSAT News Service Bulletin 114.03
From AMSAT HQ SILVER SPRING, MD.

April 24, 2011
To All RADIO AMATEURS
BID: $ANS-114.03

The April 2011 issue of the AMSAT-INDIA newsletter is now available
for free download.

Topics in this month's edition include:

- Update on the Technical talk held on April 17th
- Update on the CubeSat Communication system project by AMSAT INDIA.
- News from AMSAT organizations around the world

Download the newsletter from
http://amsatindia.org/Newsletter/AMSATINDIA-News-April2011.pdf

Previous issues are available at:
http://www.amsatindia.org/Newsletter/

Regards

Nitin [VU3TYG]
Secretary, AMSAT India
vu3tyg@amsatindia.org
www.amsatindia.org

[ANS thanks Nitin, VU3TYG, for the above information]

/EX

SB SAT @ AMSAT $ANS-114.04
Ukrainian Hams Lose Allocations Including Some Satellite Bands

AMSAT News Service Bulletin 114.04
From AMSAT HQ SILVER SPRING, MD.
April 24, 2011
To All RADIO AMATEURS
BID: $ANS-114.04

Some restructuring news out of the Ukrane that's bad news for ham
radio operators in that nation. This, as the Ukrainian government
has affirmed new rules for amateur radio operations that have
resulted in spectrum losses on the High Frequency, UHF and micro-
wave bands.

According to an e-mail from Alexander Doshchich, UY0LL, the spectrum
withdrawn from access by Ukranian hams includes 10.100 to 10.150 and
14.250 to 14.350 MHz on the HF bands. On UHF an above the losses in-
clude 1240 to 1300 MHz, 2300 to 2450 MHz, 5670 to 5850 MHz and numer-
ous other spectrum slots right on up to 248 to 250 GHz.

[ANS thanks Newsline for the above information]

/EX

SB SAT @ AMSAT $ANS-114.05
FCC Decision in Favor of ReconRobotics Affects Satellite Frequencies

AMSAT News Service Bulletin 114.05
From AMSAT HQ SILVER SPRING, MD.
April 24, 2011
To All RADIO AMATEURS
BID: $ANS-114.05

A robot used to covertly transmit live video during military operations in Iraq and Afghanistan was approved by the Federal Communications Commission (FCC) for use by local and state fire-fighters and police, ending a legal battle between amateur radio operators and law enforcement over the device.

Called the Recon Scout Throwbot, the robot transmits over the 430-448 MHz portion of the 420-450 MHz frequency band, which is primarily used by the federal radiolocation service. The spectrum is also utilized by amateur radio enthusiasts. The latter group, spearheaded by the American Radio Relay League (ARRL), opposed a waiver request filed with the FCC by Recon Scout maker ReconRobotics, Inc. to use the band.

The ARRL argued that ReconRobotics' claims that the device would be useful in public safety and anti-terrorism operations didn't prove that a waiver to use the frequency bands was in the public interest. The FCC admitted, in its order approving the waiver, that while some interference in the frequency bands may occur, it isn't a reason to prohibit the use of the Recon Scout.

The FCC approval does come with some limitations, however. The robot can only be used by state and local police and firefighters on the specific band. Operators must also first use the Recon Scout on 436-442 MHz bands. If those frequencies are inaccessible, then the 430-436 MHz and 442-448 MHz bands - where interference is more likely - can be accessed.

In a subsequent Order on Reconsideration released April 15, the FCC granted the ARRL's request for changes in the labeling and instruction manual requirements to ensure that users of the Recon Scout are aware of the interference limitations.

Use of the device is also limited to emergencies involving threats to the safety of life and training purposes. In addition, the Recon Scout is restricted from use near various radar installations and Air Force bases, and the amount of units that can be sold is limited to 2,000 the first year and 8,000 the second year. After that period of time, future sales will be re-evaluated, according to the FCC.

Read more on the Government Technology website at:
http://tinyurl.com/3gbdru6

[ANS thanks Govtech.com and Southgate ARC News site for the above information]

/EX

SB SAT @ AMSAT $ANS-114.06
Satellite Shorts From All Over

AMSAT News Service Bulletin 114.06
From AMSAT HQ SILVER SPRING, MD.
April 24, 2011
To All RADIO AMATEURS
BID: $ANS-114.06

+ Members of the Camb-Hams will be activating the Isle of Arran
between May 1-8th. They will be operating as GS3PYE/P and
GS6PYE/P. Activity will be on all bands 160-2 meters, and
70cm via satellites. For VHF, the island lies in IO75. More
information is available at:
http://dx.camb-hams.com/dx-peditions/arran-dxpedition-11/
On Twitter at: http://twitter.com/g3pye
On Facebook at: http://facebook.com/ArranDX

+ A group of enthusiastic Mexican ham radio operators, IsmaelXE1AY,
Gustavo XE1KKK, Francisco Javier XE1P, Ricardo XE1RZL, Ricardo
Raymundo XE1SOV, Fernando XE1VGC, Jose XE1UYU, Martin XE1UZH,
Modesto XE1UZU, Juan Manuel XE2IA, Jose XE2IVG and Ricardo XE3NMC
will be active from Isla de Lobos (IOTA NA-221, WW Loc. EL11JK),
Veracruz State, between 29th April and 1st May 2011. They will also
activate the Lobos Island lighthouse QRV on all HF bands, plus 6
metres and AO27, AO51 and SO50 Satellites. Modes: CW, SSB and
RTTY. QSL via XE1AY. Website: xf2p.puebladx.org/XF2P/Bienvenida.html

+ Transatlantic Balloon Launch now planned for April 27-29 depending
on weather conditions. Hams in the USA and worldwide are needed to
listen on 7.1023 and 10.1466 MHz and to send readings of the
balloon's
progress to PBH15.data@gmail.com. More information about the program,
including the latest projected flight path, can be found at
http://www.projectbluehorizon.com/ and https://twitter.com/PBH5.
It also has an APRS GPS tracker on 144.39 with the callsign KC2ZJH
and will launch from Oswego, NY.

+ Iran plans to launch a monkey into space in mid-September according
to a press release by the ISNA news agency. The monkey will be sent
into orbit in a capsule carried by the Kavoshgar-4 rocket. Full story
available on-line at: http://tinyurl.com/3wlehmt (Space-Travel.com)

+ The next Hudson Valley Satcom net will be Thursday, April 28 at
8PM EDT (UTC-4). You can join the net via the N2EYH-L EchoLink
Node or on the 146.970 MHz repeater -600; PL 100 if you are within
range. More info at http://www.hvsatcom.org or or e-Mail:
wa2aqh@amsat.org (Stu, WA2BSS)

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-114.07
ARISS Status - 18 April 2011

AMSAT News Service Bulletin 114.07
From AMSAT HQ SILVER SPRING, MD.
April 24, 2011
To All RADIO AMATEURS
BID: $ANS-114.07

1. Upcoming School Contacts

Primary School "Dante Alighieri" De Neuquen, located in Neuquen - Patagonia, Argentina, has been scheduled for an Amateur Radio on the International Space Station (ARISS) contact on Monday, April 18 at 12:25 UTC. The contact will be performed with support from CETRA (Science Education and Technology united by Ham Radio), a delegation of AMSAT-Argentina which promotes space activities and amateur radio in schools, using station LU8YY. This activity has been integrated into science and technology lessons and plans have been made for students to visit the local observatory to research the history of space exploration and space shuttles.

Istituto Comprensivo Dedalo 2000 - Scuola secondaria di Cingia de' Botti in Solarolo Rainerio, Italy has been scheduled for an Amateur Radio on the International Space Station (ARISS) contact on Saturday, April 23 at 09:13 UTC via telebridge station W6SRJ in California. Students participating in this ARISS activity have been learning about astronomy, physics of radio waves, the history of space flights and the history of radio communications.

2. Recent ARISS Contacts

Students from John XXIII College, Perth, Western Australia experienced an ARISS contact on Monday, April 11. Telebridge station W6SRJ in California provided the radio connection. On-orbit astronaut Cady Coleman, KC5ZTH fielded 13 questions from the students who were interested in how missions on the ISS benefit life on Earth as well as future missions to Mars.

On Wednesday, April 13, Hopewell Ave Public School, Ottawa, Ontario, Canada took part in an ARISS contact via telebridge station WH6PN in Hawaii. Six hundred students gathered in the gym for the event and listened to astronaut Paolo Nespoli answer 16 questions posed by the youth. ARISS mentors took large screens to the school and showed the students videos of space and the ISS construction along with some special effect videos.

The school and community were thrilled with the ARISS contact and the opportunity for their young students to take part in this event. Talk Radio CFRA ran a story about the contact: http://www.cfra.com/?cat&#65533;nidx953

An ARISS contact was held between middle school students attending Istituto Sociale, a Catholic school in Turin, Italy and ISS astronaut

Paolo Nespoli, IZ0JPA on Thursday, April 14. The radio connection was made possible via telebridge station K6DUE in Maryland. Students asked 19 questions concerning things such as mission training and the daily routine and tasks performed on the ISS. Over 200 students, teachers and guests turned out for the event. The ARISS contact was highly appreciated, since many modules of the ISS have been built in Turin by Thales Alenia Space. Regional and local media covered the event.

3. Astronaut Training Status

Astronaut Luca Parmitano, KF5KDP (Expedition 36)
is scheduled for an ARISS basic
operations session on Monday, April 25.

Dan Burbank, KC5ZSX is scheduled for a preflight session in early May.
He is slated to fly with Expedition 29 in September 2011.

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the
President's
Club. Members of the President's Club, as sustaining donors to AMSAT
Project
Funds, will be eligible to receive additional benefits. Application
forms
are
available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS
ku4os at amsat dot org

61. Weekly Highlights of Solar and Geomagnetic Activity, 18 - 24 April 2011

Newsgroup: rec.radio.amateur.space
Date: 2011-04-26 21:30:05 UTC
From: SWPC.Webmaster@noaa.gov
Message-ID: <20110426213001.BAA2333C5C@panix2.panix.com>
Source record: 487
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.info

```
:Product: Weekly Highlights and Forecasts
:Issued: 2011 Apr 26 1649 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
# Weekly Highlights and Forecasts
#
Highlights of Solar and Geomagnetic Activity
18 - 24 April 2011

Solar activity ranged from low to moderate levels. Region 1195 (S16,
L=129, class/area Ekc/340 on 22 April) produced the majority of the
flares observed during the period. Solar activity from 17-21 April
was limited to C-class or lower x-ray flares. Activity increased to
moderate for a day on 22 April as Region 1195 produced two M-class
flares, an M1.8/SN at 0457Z and an M1.2/1N at 1553Z. Neither
significant radio emissions nor coronal mass ejections (CMEs) were
associated with these flares. Activity returned to low levels, with
only C-class or lower flares observed for the remainder of the week.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit began
the period at moderate levels and fluctuated between normal and
moderate levels each day during the week.

Geomagnetic field activity ranged from quiet to minor storm levels
during the week. The week began with with a 24 nT sudden impulse at
18/0634Z followed by unesttled to occasionally active levels at mid
latitudes, and minor storm periods at high latitudes. The
disturbance was attributed to the passage of a CME. Activity
decreased to quiet to unsettled levels on 19 April. Minor storm
levels returned on 20 April, briefly reaching major storm levels at
high latitudes with the onset of a coronal hole high speed stream
(CH HSS). Solar wind speed at the ACE spacecraft peaked over 540
km/s mid-day on the 20th, then gradually decreased through 23 April.
Quiet to unsettled levels prevailed on 21-24 April as the CH HSS
effects subsided.

Forecast of Solar and Geomagnetic Activity
27 April - 23 May 2011

Solar activity is expected to be at low levels through the period
with a chance for isolated M-class flares until Region 1195 rotates
```

off the visible disk on 01 May.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at normal to moderate levels during most of the period. However, an increase to moderate to high flux levels is possible from 02 - 05 May, 11 - 13 May and 19 - 22 May in response to coronal hole high speed streams.

Geomagnetic field activity is expected to be unsettled to active on 30 April - 02 May, 08 - 10 May, and 18 - 19 May in response to geoeffective recurrent coronal hole high speed streams. The remainder of the period is expected to be quiet.

62. Crossposting Permitted to rec.radio.amateur.moderated

Newsgroup: rec.radio.amateur.space
Date: 2011-05-01 06:00:03 UTC
From: rram@panix.com
Message-ID: <radio/ham-radio/moderated/crossposting-1-1304229601@panix.com>
Source record: 488
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.info

```
Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/moderated/crossposting
Revision: 1.1 2009/04/12 19:42:04
Posting-Frequency: posted monthly
URL: http://www.panix.com/~rram/usenet/rram/index.html

Changes followed by "|".

After a 30-day public discussion and feedback period to gauge reader
opinions in March of 2009:

http://groups.google.com/group/rec.radio.amateur.moderated/browse_thread/thread/d7d337db35
f23326

the rec.radio.amateur.moderated Moderation Team has decided to consider
amending its charter, and permit limited simultaneous crossposting to
rec.radio.amateur.moderated and one other unmoderated
amateur-radio-related discussion newsgroup. We are currently trying
this on a temporary basis (90 days, through early July 2009), and adopt
it permanently if successful.

Approved rec.radio.amateur.* newsgroups are those that are currently
listed in the latest version of the "List of Big Eight Newsgroups" which
is crossposted monthly to news.announce.newgroups, news.groups, and
news.lists.misc.

Approved alt.radio.amateur.* and alt.ham-radio.* newsgroups are those
that have been created consistent with the suggestions in "So You Want
to Create an Alt Newsgroup" at:

http://www.faqs.org/faqs/alt-creation-guide/

Approved regional hierarchy newsgroups are those that contain either
"radio.amateur" or "ham-radio" in their names, including
uk.radio.amateur and aus.radio.amateur.misc.

We will make every reasonable effort to keep our list of approved
newsgroups up-to-date. In case we have overlooked any, and a submission
is rejected in error as a result, the rejected submitter can E-mail us
at our administrative contact address (in the signature at the bottom of
this article, and the default Reply-To for the rejection message)
requesting that it be added, and that the article be approved. We may
still choose to reject articles crossposted to any alt.* newsgroup with
an inappropriate name, including obscene language, embedded
name-calling, or encouragement of unlawful conduct.
```

Please direct any comments, questions, or criticisms to
rec-radio-amateur-moderated-request@panix.com.

63. ANS-121 AMSAT News Service Weekly Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2011-05-01 15:47:46 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <003501cc0817$18f0b540$4ad21fc0$@net>
Source record: 489
Cross-posted to: rec.radio.amateur.space,rec.radio.info

AMSAT NEWS SERVICE
ANS-121

ANS is a free, weekly, news and information service of AMSAT North
America, The Radio Amateur Satellite Corporation. ANS reports on the
activities of a worldwide group of Amateur Radio operators who share
an active interest in designing, building, launching and communicating
through analog and digital Amateur Radio satellites.

****
* NOTICE: Requesting Volunteers to Help at the AMSAT booth at Dayton. *
* Gould, WA4SXM, is looking for volunteers to help man the AMSAT booth *
* during the 2011 Hamvention in Dayton. People are needed all 3 days *
* for 2 hour shifts. Please send the days and times you are available *
* to help as well as how many shifts you are willing to work to *
* wa4sxm at amsat.org. *
****

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* Dayton Update
* AO-51 Status
* OSCAR-11 REPORT 27 April 2011
* 2nd ARISS Amateur Radio Station Installed in ISS Columbus Module
* Satellite Shorts From All Over
* ARISS Status - 25 April 2011
* UT1FG/MM Photos Posted on the Web
* Radio Hams on Endeavour's final flight

SB SAT @ AMSAT $ANS-121.01
Dayton Update

AMSAT News Service Bulletin 121.01
From AMSAT HQ SILVER SPRING, MD.
May 1, 2011
To All RADIO AMATEURS
BID: $ANS-121.01

Dayton Update
Hamvention is only 3 weeks away, please join AMSAT at all
of the activities planned during the event.
Stop by the booth to meet and talk with your AMSAT Officers
and Board members.

See the AMSAT Web site for complete details. As usual we have
a nice renewal/new member premium this year.

Thursday, 19 May booth setup and Get-Together at Tickets Pub

Friday, May 20
Booth open with new items, ARISSat and Fox exhibits, visit
by astronaut Doug Wheelock, KF5BOC AMSAT/TAPR Banquet with
renowned voice codex expert David Rowe, VK5DGR. His talk
will be on The Village Telco.
Reservations for the Banquet close on Monday May 16th. Use
the AMSAT store to make your reservations.
Satellite demonstrations

Saturday
Booth open with new items, ARISSat and Fox exhibits, visit
by astronaut Doug Wheelock, KF5BOC Satellite demonstrations
AMSAT Forum 11:15 - 1:30 in Forum Room 5

Sunday
Booth open with new items, ARISSat and Fox exhibits, visit
by astronaut Doug Wheelock, KF5BOC Satellite demonstrations

[ANS thanks Gould, WA4SXM, for the above information]

/EX

SB SAT @ AMSAT $ANS-121.02
AO-51 Status

AMSAT News Service Bulletin 121.02
From AMSAT HQ SILVER SPRING, MD.
May 1, 2011
To All RADIO AMATEURS
BID: $ANS-121.02

For now, it looks like the PL tone management (and changes to other
settings) has helped to keep AO-51 running and supporting normal op-
erations. We are now running around 475 mW of power out on 435.300 MHz.

Over the last few days, some of you on the east coast of the U.S. have
probably heard command stations downloading telemetry files on the
435.300 frequency. You can expect this to happen every few days; some-
times in the AM, sometimes in the PM. Because it's 9600 baud packet,
it sounds like a carrier or open squelch with a "SSSSSHHHHHHHHHH" sound
to it. If you hear that sound, there isn't much use in trying to uplink;

it means we're collecting telemetry and the voice repeater is off for
the moment. Wait for the "SSSHHHHHHH" sound to go away, and you'll know
the voice repeater is active again.

The current power budget makes it very hard to run both transmitters at
the same time. Also, we are trying to keep the amount of commanding to
a minimum, so using the single transmitter for both voice and telemetry

is our current approach. We'll see how it goes. It does mean that it eats into voice operations a little, but the trade off is worth it-both for the short and long terms.

In the meantime, keeping using our old bird when it's active! We don't want to take it for granted...

73 on behalf of the Command Team,
Mark L. Hammond [N8MH]

[ANS thanks Mark, N8MH, for the above information]

/EX

SB SAT @ AMSAT $ANS-121.03
OSCAR-11 REPORT 27 April 2011

AMSAT News Service Bulletin 121.03
From AMSAT HQ SILVER SPRING, MD.
May 1, 2011
To All RADIO AMATEURS
BID: $ANS-121.03

OSCAR-11 REPORT 27 April 2011

This report covers the period from 02 March to 27 April 2011 . During this time the satellite has been heard from 03 to 13 March, 24 March to 03 April, 13 April to 23 April 2011. It is expected to switch-on again 04 May until 14 May.

Excellent signals have been reported from stations located around the world, and good copy obtained from decoded telemetry frames.

Transmissions are controlled by the watchdog timer, which has a 20.7 day cycle time, 10.35 days on, 10,35 days off. Solar eclipses occur during every orbit, when signals are weaker. This indicates that there is still some capacity remaining in the battery.

The on-board clock is now very stable. It gained 12 seconds during during the current reporting period. This is comparable with its accuracy when the satellite was fully operational, when it gained approximately one minute per year. However, there is still an accumulated loss of 309 days, which has occurred during eclipses of the last few years.

The VHF beacon frequency is 145.826 MHz. AFSK FM ASCII Telemetry

Reception reports have been received from Horatio CX8AF, Jerry WB5LHD and Stefano IZ1GRJ. Many thanks.

At the present time, while OSCAR-11 is operating in a predictable way, I no longer need direct reports or files by e-mail. However, could all listeners continue to enter their reports on the general satellite status website

http://oscar.dcarr.org/index.php. This is a very convenient and easy to use facility, which shows the current status of all the amateur satellites, and is of use to everyone. Reports around the expected times of switch-on and switch-off are of special interest, especially for times 12:00 - 17:00 and 22:00 - 07:00 UTC, to when the satellite is out-of-range in the UK.

A longer version of this report report is available on my website, and new listeners to OSCAR-11 should read this for further information. The URL is www.g3cwv.co.uk/oscar11.htm . This page contains a links to the longer report, a short audio clip to help you identify the satellite and a file of the last telemetry received. The website also contains an archive of news & telemetry data which is updated from time to time, and details about using a soundcard or hardware demodulators for data capture. There is also software for capturing data, and decoding ASCII telemetry.

73 Clive G3CWV G3CWV@amsat.org (please replace the x's by g3cwv)

[ANS thanks Clive, G3CWV, for the above information]

/EX

SB SAT @ AMSAT $ANS-121.04
2nd ARISS Amateur Radio Station Installed in ISS Columbus Module

AMSAT News Service Bulletin 121.04
From AMSAT HQ SILVER SPRING, MD.
May 1, 2011
To All RADIO AMATEURS
BID: $ANS-121.04

2nd ARISS Amateur Radio Station Installed in ISS Columbus Module

NASA reported this week that Astronaut Cady Coleman completed the installation of the original ARISS Ericsson radio in the Columbus Orbital Laboratory, connecting it to a 2 m/70 cm antenna installed last year via EVA and creating the second amateur radio station aboard the ISS. Astronaut Paolo Nespoli checked out the radio's audio for proper functioning by talking with ham operators on the ground.

In addition to this second station, the Amateur Radio - Columbus (ARCOL) Working Group has already accomplished the assembly and installation of the L- and S-band patch antennas mounted on the exterior of the Columbus Module to be used with future radio sys-tems to be launched to the ISS.

[ANS thanks the ARISS team for the above information]

/EX

SB SAT @ AMSAT $ANS-121.05
Satellite Shorts From All Over

AMSAT News Service Bulletin 121.05
From AMSAT HQ SILVER SPRING, MD.
May 1, 2011
To All RADIO AMATEURS
BID: $ANS-121.05

Satellite Shorts From All Over

+ Central States VHF Society Vice President Kent Britain, WA5VJB has issued a call for papers for the CSVHFS Proceedings. Kent says the deadline is May 20. The CSVHFS is trying to have an emphasis on smaller papers this year such as 1 to 2 page "Hints and Kinks" covering radio modifications, rover and contest operations, antenna construction, etc. Kent says there are plenty of open slots and interested contributors should contact him at WA5VJB@FLASH.NET immediately.

+ Word has been received that the XF2P HF, 50 MHz and Satellite operation initially planned from the Isla de Lobos, Veracruz State, Mexico has been forced to revise their plans. The group's webpage (http://xf2p.puebladx.org/XF2P/Bienvenida.html) reports that bad weather has closed down navigation to the island. The group plans to operate from Riachuelos, Veracruz, Mexico between April 28 through May 1. XE1AY will be conducting satellite operations from rare grids nearby.

+ JD1 - OGASAWARA, AS-031 satellite operation is planned when Makoto, JD1BLY (JI5RPT), Harry,JD1BMH (JG7PSJ), and Masaru,JD1BMT (JE4SMQ), are staying on Chichijima (AS-031) again by the end of April and beginning of May. Team members will stay there for different period of times. You can expect activities from:
JD1BLY: Apr 30 until May 7
JD1BMT: Apr 30 until May 4
JD1BMH: May 4-13
Activities are planned in CW, SSB and digital modes on 160m-6m and via satellite. You can visit the websites of the OPs for news and logs:
JD1BLY: http://www.ji5rpt.com/jd1
JD1BMH: http://sapphire.es.tohoku.ac.jp/jd1bmh
JD1BMT: http://homepage3.nifty.com/maaberu/logsjd1/logsearch.html
QSL cards should be sent via bureau or direct to their homecalls.

+ Remember to listen for the Camb-Hams members Bob G1SAA, Terry G3VFC, Martin G3ZAY, Colin G4ERO, Colin G8TMV, Mark M0MJH, Rob M0VFC, Steve M1ACB and Gavin M1BXF who will be active between May 1-8 the Isle of Arran. Website: http://dx.camb-hams.com/.

+ NASA is collecting names to be put on a microchip that'll be onboard the Mars Science Laboratory rover heading to Mars in the fall of 2011. Some Radio Amateurs have been adding their call sign to last name

field. You can add your name and call on the Mars microchip at:
http://tinyurl.com/marsham.

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-121.06
ARISS Status - 25 April 2011

AMSAT News Service Bulletin 121.06
From AMSAT HQ SILVER SPRING, MD.
May 1, 2011
To All RADIO AMATEURS
BID: $ANS-121.06

1. Upcoming School Contacts

The Italian Air Force Academy in Pozzuoli, Italy has been scheduled for an Amateur Radio on the International Space Station (ARISS) contact on Thursday, April 28 at 07:04 UTC via telebridge station LU1CGB in Argentina. This contact has been integrated into the aerospace engineering curriculum for cadets and will draw interest from the scientific community.

Ecole Primaire de Larochette (Fiels), Larochette (Fiels), Luxembourg has been scheduled for an Amateur Radio on the International Space Station (ARISS) contact on Friday, April 29 at 10:12 UTC via station WH6PN in Hawaii. School lesson plans have covered space exploration, communications and human spaceflight. Field trips, radio demonstrations and hands-on activities have been planned. The radio contact with the ISS will be the highlight of this science program.

Scuola Secondaria I Grado "M.Maccioni" Nuoro, Nuoro, Italy, has been scheduled for an Amateur Radio on the International Space Station (ARISS) contact on Friday, April 29 at 15:56 UTC via station IK1SLD in Italy. The contact will be held in collaboration with the Astronomical Association of Nuoro during Spring Festival and has been integrated in the Maccioni students' studies of astronomy and space flight.

2. Recent ARISS Contacts

On Monday, April 18, an ARISS contact was held between youth visiting the Toyota Children's Scientific Expedition in Toyota, Aichi, Japan and Cady Coleman, KC5ZTH on the ISS. The Scientific Expedition teaches children about science and engineering through the various experiments it offers and on this day, the ARISS contact was the featured event, drawing approximately 100 people including representatives from four newspapers. Video is available:
http://www.ariss.jp/toyota/video/ARISS.wmv

On-orbit astronaut Paolo Nespoli, IZ&#65533;JPA participated in a successful contact with students from Primary School "Dante Alighieri" De Neuquen

located in Neuquen - Patagonia, Argentina, on Monday, April 18. Four hundred students and guests attended the event and were pleased that Nespoli continued answering their questions over a second ISS pass. The contact was performed with support from CETRA (Science Education and Technology united by Ham Radio), a delegation of AMSAT-Argentina which promotes space activities and amateur radio in schools, using station LU8YY. This activity was integrated into the science and technology curriculum.

On Saturday, April 23, Istituto Comprensivo Dedalo 2000 - Scuola secondaria di Cingia de' Botti students in Solarolo Rainerio, Italy spoke with astronaut Paolo Nespoli, IZ�JPA via an ARISS contact, using telebridge station W6SRJ in California for the radio link. Nearly 150 students, teachers and guests turned out for the event during which Nespoli answered 18 space-related questions. The contact was the culmination of science lessons covering astronomy, physics of radio waves, the history of space flights and the history of radio communications.

3. ARISS International Team Meeting Held

The ARISS International Team held its monthly teleconference on Tuesday,

April 19. A status was given on the radio that will be installed in the Columbus Module and a discussion was held about issues concerning the recent Gagarin Commemorative Event. Minutes have been posted. See: https://www.rac.ca/ariss/arisstel2011-04-19.htm

4. ARISS in ARRL QST

The American Radio Relay League (ARRL) included an ARISS item in its May QST. The "In Brief" column discusses how Astronaut Doug Wheelock, KF5BOC, will be attending the ARRL Expo exhibits at the Dayton Hamvention as a special guest of ARRL and AMSAT.

5. AMSAT Update on ARISSat-1

The AMSAT (Radio Amateur Satellite Corporation) News Service put out a bulletin (ANS-114) on April 24 that gave an update on ARISSat-1. The item talks about the satellite's battery status and how this affected its activation during the Gagarin Event on April 12. See: http://amsat.org/pipermail/ans/2011/000508.html

[ANS thanks Carol, KB3LKI, for the above information]

/EX

SB SAT @ AMSAT $ANS-121.07
UT1FG/MM Photos Posted on the Web

AMSAT News Service Bulletin 121.07
From AMSAT HQ SILVER SPRING, MD.
May 1, 2011
To All RADIO AMATEURS

BID: $ANS-121.07

UT1FG/MM Photos Posted on the Web

John, K8YSE invites you to view the photos he has posted on his web page showing Yuri, UT1FG/MM aboard his ship the MV Mottler. Yuri has operated maritime mobile on his sea voyages between Russia, Europe, North America, Central America, and South America sailing across the Atlantic, Caribbean, and Pacific Oceans.

John explains, "Yuri, UT1FG/MM, is currently in port at San Juan Puerto Rico. Walt, WP4T and his family drove over to San Juan to attempt to see him. They were successful and were treated to a red carpet tour of his ship the Mottler. They took pictures and they are available for viewing on my website: http://www.papays.com/sat".

The Mottler is very modern and was just built in 2009. Yuri has logged many miles on it He will fly home to the Ukraine later this week.

[ANS thanks John, K8YSE and Walt, WP4T for the above information]

/EX

SB SAT @ AMSAT $ANS-121.08
Radio Hams on Endeavour's final flight

AMSAT News Service Bulletin 121.08
From AMSAT HQ SILVER SPRING, MD.
May 1, 2011
To All RADIO AMATEURS
BID: $ANS-121.08

Radio Hams on Endeavour's final flight

Radio Amateurs Greg Chamitoff KD5PKZ, Mike Fincke KE5AIT and Robert Vittori IZ6ERU will be on the Space Shuttle Endeavour when it blasts off. The launch will be broadcast on NASA TV.

During the 14-day mission, Endeavour will deliver the Alpha Magnetic Spectrometer (AMS) and spare parts including two S-band communications antennas, a high-pressure gas tank and additional spare parts for Dextre. This will be the 36th shuttle mission to the International Space Station.

Follow these links for additional information"
NASA TV
http://www.nasa.gov/multimedia/nasatv/

NASA - STS-134: Endeavour
http://www.nasa.gov/externalflash/134_flash/

NASA Podcast - STS-134: What's Going Up
http://www.nasa.gov/multimedia/podcasting/whatsgoingupsts134.html

[ANS thanks the Southgate ARC News Site for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's
Club. Members of the President's Club, as sustaining donors to AMSAT Project
Funds, will be eligible to receive additional benefits. Application forms
are
available from the AMSAT Office.

73,
This week's ANS Editor,
Dee Interdonato, NB2F
nb2f at amsat dot org

64. WSR-119 AMSAT Weekly Satellite Report

Newsgroup: rec.radio.amateur.space
Date: 2011-05-01 15:56:15 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <003701cc0818$40052ca0$c00f85e0$@net>
Source record: 490
Cross-posted to: rec.radio.amateur.space,rec.radio.info

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This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-119.S1
WSR 119 Part 1 04/29/2011

AMSAT NEWS SERVICE BULLETIN 119.S1
FROM AMSAT HQ SILVER SPRING, MD, April 29, 2011
TO ALL RADIO AMATEURS
BID: $WSR-119.S1

HO-68 HOPE-1 (CAS-1)(XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009 0231z
Launch site: Taiyuan Space Center, PRC

Status: By schedule

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
145.9250 - 145.9750 MHz SSB/CW
145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
435.7650 - 435.7150 MHz SSB/CW
435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://
[02092011]
=====
SO-67 SumbandilaSat
```

Catalog Number: 35870
Launch Date: September 17, 2009 1555z
Launch site: Baikonur, Kazakhstan

Status: By schedule

Callsign: ZS0SUM

Uplink: 145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/
[02092011]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[02092011]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05, 2005 0444z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.9360 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[02092011]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004 0745z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode(s):
Voice repeater: V/u
Uplink: 145.880 MHz FM - 67hz PL required
Downlink: 435.300 MHz FM

Telemetry: By Command ONLY
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.880 MHz FM
145.920 MHz FM
145.920 MHz FM - 67 Hz PL tone burst
1268.705 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.703 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[04292011]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002 1700z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4
Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the re-
peater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
the 10 minute timer.
[02092011]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993 0140z
Launch site: Kourou, French Guiana

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[02092011]
=====
AO-7 AMSAT OSCAR 7

Catalog number: 07530
Launch Date: November 15, 1974
Launch site: Vandenberg AFB, California, USA

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
145.972 MHz CW
435.100 MHz CW
2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02092011]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
Kourou, French Guiana
Uchinoura Space Center, Japan
Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - OFF
APRS - OFF
SSTV - OFF

Expedition 27 Crew:
Commander: Dmitry Kondratyev
Flight Engineer: Catherine Coleman KC5ZTH
Flight Engineer: Paolo Nespoli IZ0JPA

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM

Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[03212011]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-119.S2
WSR 119 Part 2 04/29/2011

AMSAT NEWS SERVICE BULLETIN 119.S2
FROM AMSAT HQ SILVER SPRING, MD, April 29, 2011
TO ALL RADIO AMATEURS
BID: $WSR-119.S2

O/OREOS
Catalog Number: 37224
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.035 MHZ AX.25

Beacon:

Callsign:

URL: http://www.ooreos.org/
[02092011]
=====
Rax-1 Radio Aurora Explorer
Catalog Number: 37223
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.505 MHz 9k6 GMSK

Beacon:

Callsign: RAX-1

URL: http://rax.engin.umich.edu/
[02092011]
=====
Fastrac-1 Sara Lily
Catalog Number: 37225
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On orbit

Uplink 1: 145.980 MHz 1k2 baud
Uplink 2: 145.825 MHz 1k2 baud
Downlink: 437.345 MHz 1k2 and 8k6 baud

Beacon: 437.435 MHz 1k2 AX.25

Callsign: Fast1

URL: http://fastrac.ae.utexas.edu/index.php
[02092011]
=====
Fastrac-2 Emma
Catalog Number: 37227
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink 1: 435.025 MHz 1k2 baud
Uplink 2: 437.435 MHz 9k6 baud
Downlink: 145.825 MHz

Beacon: 145.825 MHz 1k2 AX.25

Callsign: Fast2

URL: http://fastrac.ae.utexas.edu/index.php
[02092011]
=====
StudSat
Catalog Number: 36796
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink: 437.505MHz, 9600bps FSK
Downlink: 437.505MHz, 9600bps FSK
Beacon : 437.505MHz, 20bps ASK
[02092011]
=====
TIsat-1
Catalog Number: 36799
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On orbit

Callsign: HB9DE

Uplink: 145.980MHz FM, AFSK
Downlink: 437.305MHz FM, AFSK
Beacon: 437.305MHz CW
[02092011]
=====
HO-68 HOPE-1 (CAS-1)(XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009 0231z
Launch site: Taiyuan Space Center, PRC

Status: By schedule

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
145.9250 - 145.9750 MHz SSB/CW
145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
435.7650 - 435.7150 MHz SSB/CW
435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://
[02092011]

=====
SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w): 437.5050MHz FSK 1k2bps
[02092011]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
437.3850 MHz FSK 9k6bps
[02092011]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps
[02092011]
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
Beacon(500mw): 436.000MHz GMSK 9k6bps
[02092011]
=====
CP-6
Catalog Number: 35003
Launch Date: May 19, 2009 2355z

Launch site: Wallops Island, Virginia, USA

Status: Operational

Downlink: 437.365 MHz 1k2 AFSK
[02092011]
=====
HAWKSAT 1
Catalog number: 35004
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: operational

Downlink: 437.345 MHz ?
[02092011]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: Operational

Downlink: 437.465 MHz 1k2 AFSK
[02092011]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009 0115z
Launch Site: Satish Dhawan Space Centre, India

Status: ?

Downlink: 435.000 MHz
Uplink: 145.800 MHz

Telemetry: 137.400 MHz
[02092011]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon: 437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[02092011]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: In Orbit

Downlink: 437.375 MHZ FSK9k6/CW
Beacon: 437.375 MHz FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[02092011]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
437.465 MHz FM/CW
Beacons: 437.305 MHz FM/CW
437.275 MHz FM/CW

Callsigns: JR5YBN
JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[02092011]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Downlink: 437.455 MHz AFSK/CW
Beacon: 437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[20092011]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon: 437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[02092011]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008 1520z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Curent Modes: Telemetry
Audio
Images

Downlinks: 435.315 MHz
435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02092011]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web
page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[02092011]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[02092011]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Digipeater

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL
=/satellites/status.php
[02092011]
=====
Compass-1

Catalog number: 32787
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Current Mode: 4k8 MSK packet

Uplink: 145.980 MHz FM
Downlink: 437.275 Mhz CW
437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[02092011]
=====
CO-66 Seeds II
Catalog number:
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web
page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL
=/satellites/status.php
[02092011]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[02092011]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[02092011]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005 0652z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[02092011]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: ?????

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[02092011]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004 0745z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode(s):
Voice repeater: V/u
Uplink: 145.880 MHz FM - 67 hz PL required
Downlink: 435.300 MHz FM

Telemetry:
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.880 MHz FM
145.920 MHz FM
145.920 MHz FM - 67 Hz PL tone burst
1268.700 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.708 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[04292011]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[02252011]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Current Mode: CW downlink worldwide
AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php
[02092011]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001 0240z
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[02092011]
=====
RS-22 RADIO SPORT 22 (MOZHAYETS 4)
Catalog number: 27939
Launch Date: September 27, 2003 0612z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02092011]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990
Launch site: Kourou, French Guiana

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
145.860 MHz 1200-baud Manchester FSK
145.880 MHz 1200-baud Manchester FSK
145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[02092011]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984
Launch site: Vandenburg AFB, California, USA

Status: Operational

Current Mode: /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz

Mode-S Beacon: 2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[02092011]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
Kourou, French Guiana
Uchinoura Space Center, Japan
Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - OFF
APRS - OFF
SSTV - OFF

Expedition 27 Crew:
Commander: Dmitry Kondratyev
Flight Engineer: Catherine Coleman KC5ZTH
Flight Engineer: Paolo Nespoli IZ0JPA

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear

U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[03212011]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-119.S3
WSR 119 Part 3 04/29/2011

AMSAT NEWS SERVICE BULLETIN 119.S3
FROM AMSAT HQ SILVER SPRING, MD, April 29, 2011
TO ALL RADIO AMATEURS
BID: $WSR-119.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NANOSAIL-D
Catalog Number:
Ejection Date: January 17, 2011

Status: On orbit

Downlink: 437.270 MHz AX.25

URL: http://nanosaild.engr.scu.edu/dashboard.htm
[01272011]
=====
CP4
Catalog Number: 31132
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[09062010]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[09062010]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[09062010]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.250

Official Website: http://www.ncube.no
[09062010]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink 2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[09062010]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[09062010]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====

MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks: 145.850 MHz
145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545

Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks

V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON General Beacon(GB) Middle Beacon(MB) Engineering Beacon(EB)
2 m none 145.898 MHz none
70cm 435.438 MHz 435.588 MHz 435.838 MHz
13cm(1) 2400.188 MHz 2400.338 MHz 2400.588 MHz
13cm(2) 2401.173 MHz 2401.323 MHz 2401.573 MHz
3cm 10450.975 MHz 10451.125 MHz 10451.375 MHz
1.5cm 24047.885 MHz 24048.035 MHz 24048.285 MHz
[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK

[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
145.890 FM
145.930 FM
1269.700 FM
1269.800 FM
1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[07172010]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink: 435.1380 MHz AFSK 1200 BPS
Downlink: 435.2060 MHz AFSK 1200 BPS
Uplink: 145.8150 MHz AFSK 1200 BPS
Uplink: 145.8350 MHz AFSK 1200 BPS
Uplink: 145.8550 MHz AFSK 1200 BPS
Uplink: 145.8750 MHz AFSK 1200 BPS
[06042009]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Non-operational
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
145.870 MHz FM
145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[11062010]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks: 145.875 MHz FM 1200-baud
145.900 MHz FM 1200-baud
145.925 MHz FM 1200-baud
145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink: 435.0625 MHz FM 1k2bps AFSK
435.1125 MHz FM 1k2bps AFSK
435.1375 MHz FM 1k2bps AFSK

Downlink: 145.9750 MHz FM 1k2bps AFSK
2446.5025 MHz FM 1k2bps AFSK

Beacon: 2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink: 435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons: 435.795 MHz CW
435.910 MHz AX25

Voice Transponder:
Uplink: 145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks: 145.850 MHz
145.870 MHz
145.890 MHz
145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode: V/u

Uplink: 145.900 MHz FM 1200-baud Manchester FSK (reserved)
145.920 MHz FM VOICE
145.940 MHz FM 1200-baud Manchester FSK (reserved)
145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink: 437.026 MHz USB VOICE
(1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
PSK 437.026 MHz LHCP

V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink: 145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink: 145.8500 MHz MFSK 1200 BPS
Uplink: 145.8700 MHz MFSK 1200 BPS
Uplink: 145.8900 MHz MFSK 1200 BPS
Uplink: 145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.8500 - 145.9000 MHz SSB/CW
Downlink 29.4000 - 29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink: 29.4500 - 29.5500 MHz SSB/CW
Beacons: 29.450 MHz
435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
29.4500 MHz CW
[01152007]
=====
OSCAR III

Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink: 145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB

Beacon 1: 29.352 MHz (intermittent)
Beacon 2: 29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-119.S4
WSR 119 Part 4 04/29/2011

AMSAT NEWS SERVICE BULLETIN 119.S4
FROM AMSAT HQ SILVER SPRING, MD, April 29, 2011
TO ALL RADIO AMATEURS
BID: $WSR-119.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Re-entered
Re-entered: October 25, 2009

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[09062010]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 437.325 MHz 9k6 GMSK
437.325 MHz CW 20wpm
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 436.250 MHz 9k6 FHSS
[11112009]
=====
Pollux
Catalog Number: 35693
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25
[09062010]
=====
Castor (ANDE-2)
Catalog Number: 35694
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25
[09062010]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Re-Entered
Re-entered date: August 8, 2010

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[08082010]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA

850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at}
amsat.org
NNNN
/EX

65. Weekly Highlights of Solar and Geomagnetic Activity, 25 April - 01 May 2011

Newsgroup: rec.radio.amateur.space
Date: 2011-05-03 21:30:09 UTC
From: SWPC.Webmaster@noaa.gov
Message-ID: <20110503213001.E8DDC33C5C@panix2.panix.com>
Source record: 491
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.info

```
:Product: Weekly Highlights and Forecasts
:Issued: 2011 May 03 2027 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
# Weekly Highlights and Forecasts
#
Highlights of Solar and Geomagnetic Activity
25 April - 01 May 2011

Solar activity began the week at very low levels. An increase to low
occurred with a C2 x-ray event at 0233 UTC on 27 April from Region
1201 (N16, L=116, plage region). Activity continued at low levels
for the remainder of the week with the primary contributions from
Region 1199 (N20, L=188, class/area Dso/210 on 01 May), Region 1203
(N18, L=061, class/area Cso/160 on 01 May), and Region 1195 (S16,
L=191, class/area Ehi/400 on 25 April). The largest event of the
week was a C6/Sf from Region 1199 at 2332 UTC on 01 May.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at
low to moderate levels for 25-30 April, and reached high levels on
01 May.

Geomagnetic field activity was generally quiet from 25-28 April. An
increase to unsettled to active levels (with occasional storm
periods at high latitudes) occurred late on 29 April and persisted
through 01 May in response to a favorably positioned negative
polarity coronal hole. The high speed stream followed a clear solar
sector boundary crossing at 1445 UTC on 28 April. Solar wind
velocity began to increase at 1600 UTC on 29 April and reached peak
values around 740 km/s. The north-south component of the solar wind
Bz turned negative after 1600 UTC on 29 April and persisted at
generally negative values for the remainder of the week. Typical
values were in the range between 0 and -5 nT with peak values
reaching -10 to -12 nT.

Forecast of Solar and Geomagnetic Activity
04 May - 30 May 2011

Solar activity is expected to be very low to low. There is a chance
for isolated periods of moderate levels due to the possible
emergence of new regions as well as the return of old Region 1195 on
```

15 May.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at high levels for 04-07 May in response to the sustained high solar wind speed mentioned previously. Normal background levels should resume for 08-09 May but another increase to high levels is expected for 10-12 May in response to another high speed stream. Normal background levels should return for the remainder of the outlook interval with the exception of 19-20 May and 28-30 May due to recurrent high speed streams.

Geomagnetic field activity is expected to be quiet to unsettled for 04 May and generally quiet for 05-08 May. An increase to unsettled levels with possible active periods is expected for 9-10 May in response to a recurrent coronal hole. Quiet levels should prevail until 17 May when another recurrent high speed stream is expected to increase activity to unsettled to active levels. Quiet levels should return for 18-25 May, followed by an increase to unsettled to active levels with a chance for storm periods at high latitudes for 26-30 May in response to a recurrent coronal hole.

66. Radio Meteor Obs. Bull. April 2011 Lyrids

Newsgroup: rec.radio.amateur.space
Date: 2011-05-07 20:53:23 UTC
From: Chris Steyaert <observations@rmob.org>
Message-ID: <u8cbs61hpu3phq8qeovra9jcer600epqmu@4ax.com>
Source record: 492
Cross-posted to: rec.radio.amateur.space,sci.astro.amateur

Radio Meteor Observation Bulletin No. 21 of April 2011 (84 K) is available now as

http://www.rmob.org/rmobtext/rmob1104.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

Chris

67. ANS-128 AMSAT News Service Weekly Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2011-05-08 13:42:13 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <003101cc0d1e$ddee3e60$99cabb20$@net>
Source record: 493
Cross-posted to: rec.radio.amateur.space,rec.radio.info

AMSAT NEWS SERVICE
ANS-128

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

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* Volunteers are needed to Help at the AMSAT booth at Dayton. Gould *
* WA4SXM, is looking for volunteers to help man the AMSAT booth dur- *
* ing the 2011 Hamvention. People are needed all 3 days for 2 hour *
* shifts. Please send the days and times you are available to help *
* as well as how many shifts you are willing to work via e-mail to *
* wa4sxm at amsat.org. *
****

In this edition:

* AMSAT at the Dayton Hamvention 2011
* The DARA Matching Gift Challenge
* May 16 Deadline for Dayton AMSAT/TAPR 2011 Banquet Reservations
* AO-51 Batteries Failing
* Calling all software developers - AMSAT needs you!
* W5KUB Dayton Webcast to Feature Interview with Astronaut
* Satellite Shorts From All Over
* Satellite Presentations for May 2011
* 6th Anniversary of HAMSAT VO 52
* Ben Stevenson, W2BXA Silent Key

SB SAT @ AMSAT $ANS-128.01
AMSAT at the Dayton Hamvention 2011

AMSAT News Service Bulletin 128.01
>From AMSAT HQ SILVER SPRING, MD.
May 8, 2011
To All RADIO AMATEURS
BID: $ANS-128.01

The 2011 Dayton Hamvention will be held this year from May 20-22, 2011 and AMSAT will be there. The AMSAT theme for 2011 is "Providing Education Through Amateur Satellites". We will have multiple exhibits

of the new AMSAT satellites on display.

You'll find AMSAT at the same spot (Booths 444-449) in the Ball Arena, right across from the ARRL area and just inside the door from the Satellite Demonstration area. Plan to visit all of the AMSAT activities!

AMSAT has planned a number of great activities during the Hamvention. To help produce and deliver our great list of AMSAT activities we need you to volunteer to help at the AMSAT booth all three days for 2 hour shifts. Please contact AMSAT-VP User Services, Gould Smith, WA4SXM by e-mail (wa4sxm@amsat.org) to tell him the days and times you are available to help as well as how many shifts you are able to help.

Here is a sample of the events and activities planned for the entire weekend. Links to all of these activities can be found on the AMSAT web page: http://www.amsat.org.

+ Meet astronaut Doug Wheelock, KF5BOC Friday 1:30-2:30, Saturday, 3:00-4:00 at the AMSAT booth.

+ ARISSat-1 operational prototype will be on display.
o Tune your HT to 145.950 MHz to hear a preview of the FM downlink.
o Watch the demonstration of the ARISSatTLM software receive and display the CW beacon and BPSK telemetry using G6LVB's FUNcube Dongle.

+ AMSAT Thursday Night Get-together at Tickets Pub & Eatery.

+ The AMSAT Forum will be on Saturday May 21. Moderated by Alan Biddle, WA4SCA you will have a chance to hear and see the latest news of amateur radio in space.
o AMSAT President Barry Baines, WD4ASW will present an AMSAT Status Report
o Alan Kung, BA1DU, CEO of AMSAT-China, will discuss the activities of AMSAT-China.
o Project Manager for ARISSat-1, Gould Smith, WA4SXM, will talk about its operation aboard the ISS, and the planned deployment and operations this summer.
o Tony Monteiro, AA2TX, will discuss the design and status of Project-FOX.
o Alex Harvilchuck, N3NP, will present NextGen CubeSat Program Update.

+ Satellite demonstrations will take place outside the Ball Arena entrance Friday, Saturday and Sunday.

+ The fifth annual AMSAT/TAPR Banquet will be Friday night May 20. (More information below).

Be sure and come by the booth and renew your membership and receive an AMSAT multiblade screwdriver as a premium!

The AMSAT leadership team will be at Hamvention and invite you to take advantage of this opportunity to interact with both board mem-

bers and senior officers. If you have issues or concerns that you wish to express here is your chance to do so.

[ANS thanks AMSAT HQ for the above information]

/EX

SB SAT @ AMSAT $ANS-128.02
The DARA Matching Gift Challenge

AMSAT News Service Bulletin 128.02
>From AMSAT HQ SILVER SPRING, MD.
May 8, 2011
To All RADIO AMATEURS
BID: $ANS-128.02

The Dayton Amateur Radio Association (DARA) has also announced a fundraising challenge for AMSAT whereby they will match on a 1:3 basis up to $5,000.00 for donations made in 2011. That is, for every $3.00 that AMSAT raises, DARA will provide $1.00 up to a maximum of $5,000 donated by DARA.

AMSAT will be conducting fundraising at Hamvention, where donations will count against this goal. Please consider making a donation to AMSAT at Hamvention or anytime this Spring as we strive to meet this goal. We appreciate DARA's support for AMSAT and see this as an opportunity for donors to increase the impact of their donations by taking advantage of this matching program.

This is the 60th year of the Dayton Hamvention, sponsored by DARA (Dayton Amateur Radio Association). As has been the case for the many years Hamvention will be at the Hara Arena Complex on the north side of Dayton. Further information on Hamvention 2011, including advance ticket sales and motel accommodations, can be found at the Hamvention web site: http://www.hamvention.org/

[ANS thanks AMSAT HQ for the above information]

/EX

SB SAT @ AMSAT $ANS-128.03
May 16 Deadline for Dayton AMSAT/TAPR 2011 Banquet Reservations

AMSAT News Service Bulletin 128.03
>From AMSAT HQ SILVER SPRING, MD.
May 8, 2011
To All RADIO AMATEURS
BID: $ANS-128.03

May 16 Deadline for Dayton AMSAT/TAPR 2011 Banquet Reservations

The cutoff date for the AMSAT-TAPR dinner at Dayton is May 16th. You can register at the AMSAT website. As in previous years, we will NOT be selling banquet tickets at the AMSAT booth.

The fifth annual joint AMSAT/TAPR Banquet will be held Friday evening, May 20, 2011 during the Dayton Hamvention.

The Banquet will be at the:

Kohler Presidential Banquet Center
4572 Presidential Way
Kettering, OH 45429
(just south of Dayton).

The price for the Banquet is $30 per person. Reserved tickets may be picked up at the AMSAT booth at Hamvention on Friday, or at the door.

You may make reservations for the 2011 AMSAT/TAPR Banquet online in the AMSAT Store: http://www.amsat-na.com/store/item.php?id=100158

AMSAT Presidents Club Gold members should let Martha know if they are planning to attend the banquet. For additional information contact Martha at the AMSAT office (martha@amsat.org).

Banquet Schedule

6:30 PM Doors open and Cash bar is available with Beer, Wine, Liquor and soft drinks.

7:15 PM Buffet Dinner service begins. The Center has a justly deserved reputation for good food and service.

8:15 PM Presentation by David Rowe, VK5DGR - The Village Telco

There are now billions of mobile phones all over the world. However in many developing countries, mobile phones are simply too expensive to use. For example, in a country where people earn $1.50/day, a phone call can cost 21 cents/minute. This is a huge tax on communications.

David Rowe, VK5DGR, will describe how a community of people from around the world set out to fix this problem, using a mix of Wi-Fi and open source software. The result is the Village Telco - a DIY telephone company that anyone can set up.

A Village Telco is constructed from a network of "Mesh Potatoes" - small Wi-Fi boxes that are mounted on homes in a village. They form a mesh network, relaying telephone calls for each other. Each Mesh Potato connects to a regular telephone inside village homes. Phone calls on the network are free. A local person in the Village can be trained in a few hours to set up and maintain the network.

To build the Village Telco we borrowed many ideas from Ham Radio, such as sharing hardware designs and community networks.

The talk will include real world stories of how Village Telcos are helping people in several developing countries, and explain why a simple phone call that we take for granted can be so important.

[ANS thanks AMSAT HQ for the above information]

/EX

SB SAT @ AMSAT $ANS-128.04
AO-51 Batteries Failing

AMSAT News Service Bulletin 128.04
>From AMSAT HQ SILVER SPRING, MD.
May 8, 2011
To All RADIO AMATEURS
BID: $ANS-128.04

AMSAT Vice-President of Operations Drew Glasbrenner, KO4MA reported the AO-51 Command Team is having a difficult time trying to restore AO-51 to operation.

The current situation is the satellite will not retain the upload of the flight software across eclipse. The batteries are in very poor condition.

AO-51 ground control stations plan a few more things to try, but with eclipses peaking around July at approximately 27 minutes, the long term situation is grim.

There is a brief period around November where eclipses are as short as 16 minutes, but past that it is a long climb to 30 minutes or longer eclipses for many years.

At this time the Command Team cannot provide an estimated "return to service" date. Stations with 9k6 digital capability can listen in on control station attempts at recovery on 435.150 MHz on many passes over the US.

Please support AMSAT-NA and the other AMSAT groups around the world, and help us get new satellites into orbit. Projects like Fox, FunCube, P3E, and Kiwisat need your financial support to keep our amateur satellite fleet flying. You can donate to AMSAT-NA via the link on the front page at http://www.amsat.org.

Keep up with the latest AO-51 Control Team News on-line at:
http://www.amsat.org/amsat-new/echo/CTNews.php

[ANS thanks AMSAT-NA VP Operations Drew Glasbrenner, KO4MA for the above information]

/EX

SB SAT @ AMSAT $ANS-128.05
Calling all software developers - AMSAT needs you!

AMSAT News Service Bulletin 128.05
>From AMSAT HQ SILVER SPRING, MD.
May 8, 2011
To All RADIO AMATEURS
BID: $ANS-128.05

To receive the new BPSK-1000 telemetry format from ARISSat-1,
AMSAT has developed demodulation and decoding software called
ARISSatTLM. This software is designed to be used with a standard
2-meter SSB receiver. With the advent of software defined radios,
we would like to test receiving the telemetry on one of these
new devices such as the "FUNcube Dongle" receiver. This would
require modifying the software to use an I/Q source and doing
the Doppler tracking in software. The ARISSatTLM software by
Phil Karn KA9Q and Douglas Quagliana KA2UPW is open source and
is available here:

https://svn.sarpeidon.net/suitsat2/repos/ground_station_software

Interested software developers are invited to download the software
and see what you can do with it for your favorite SDR.

[ANS thanks AMSAT Vice-President of Engineering Tony Montiero,
AA2TX for the above information]

/EX

SB SAT @ AMSAT $ANS-128.06
Dayton Webcast to Feature Interview with Astronaut Doug Wheelock

AMSAT News Service Bulletin 128.06
>From AMSAT HQ SILVER SPRING, MD.
May 8, 2011
To All RADIO AMATEURS
BID: $ANS-128.06

If you cannot make it to Dayton this year you can watch the event
via the webcam broadcast by Tom Medlin, W5KUB. Tom had 28 contacts
with Col. Doug Wheelock during Expedition 25 on the International
Space Station. Tom and Doug will meet in-person with the event to
be broadcast on the webcam link at: http://w5kub.com.

W5KUB.Com will start the live broadcast on Wednesday May 18th at
approximately 0800 Central Time or 1300 UTC with the webcam mounted
in the car for the 550 mile drive to Dayton. They will broadcast the
shelter set up on Thursday morning May 19th at Hara Arena at 0900
Eastern time or 1300 UTC. Thursday afternoon they will try to broad-
cast the Air Force Museum.

Then they will be live for the entire Hamvention Friday May 20th
through Sunday May 22nd.

Tom says, "We will also be giving away over $5000 to lucky winners on
our broadcast. All you have to do is be logged into our chatroom and
claim your prize when your name is called. We have so many prizes that
we will be giving them out every 20-30 minutes during live broadcasts."

This year prizes include:

+ Grand prize FT-950
+ Icom IC80AD D-star radio

+ headsets with mic from Heil Sound
+ headset and mic from TenTec
+ Diawa wattmeters
+ LDG auto antenna tuners
+ Comet antennas
+ baluns
+ communication speakers
+ weather stations
+ ham hats
+ QSL cards
+ ham plaques
+ And many other ham related prizes

Last year over 50,000 unique hams followed the broadcast in about 150 countries. Log into the chat room on the web site and chat with us or other hams watching the broadcast. You can also join the ham chat room via your IRC client: server: irc.liveharmony.org then join #hamradio.

Tom concludes, "Watch for our interview with Astronaut Doug Wheelock when he visits the W5KUB booth. There will also be other surprise interviews and guests."

The http://w5kub.com website on-line 24 x 7, 365 days per year. It will have recorded videos on when we are not live. Come on over and say hello.

[ANS thanks Tom Medlin, W5KUB for the above information]

/EX

SB SAT @ AMSAT $ANS-128.07
Satellite Shorts From All Over

AMSAT News Service Bulletin 128.07
>From AMSAT HQ SILVER SPRING, MD.
May 8, 2011
To All RADIO AMATEURS
BID: $ANS-128.07

+ AMSAT extends sincere sympathy and best wishes to ISS astronaut Paolo Nespoli, IZ0JPA from Italy upon his recent sad news while in orbit on the International Space Station about the passing of his mother following an illness. She was 78. Nespoli is scheduled to return to Earth in three weeks.

+ A school contact with Greenville was done with the recently installed Ericsson radio from the Columbus module on the ISS. The ARISS team has received some reports that the signal may been lower than from past contacts. Please pass along your thoughts on how the signals seemed to be. ARISS had several contacts on Saturday, so if you listened, please tell ARISS how the signals sounded to you. Please post your signal reports on the sarex@amsat.org list.

+ NASA has made available for the public a new online collection of images of our solar system and locations on Earth where astrobiology researchers travel to conduct field research. The 90+ images in the collection were chosen for their scientific significance and sheer beauty. The photos can be viewed on the "From Earth to the Solar System (FETTSS)" website at: http://fettss.arc.nasa.gov/ A related story is at: http://tinyurl.com/3wzjve5 (skynightly.com)

+ NASA's Jet Propulsion Laboratory says the Space Images Version 2 app for iPad, iPhone, iPod Touch and Android is available for free download from: http://www.jpl.nasa.gov/apps/spaceimages/index.cfm
The Space Images are also available on a web site:
http://www.jpl.nasa.gov/spaceimages/

+ Kazakhstan Special Event Stations to celebrate the 50th anniversary of manned space flight using special callsigns will remain active until May 31. UN50SK (homecall UN7GWC), UO50G (UN2G), UP1ASTR (UN0GL), UP50F (UN7FW), UP50ASTR (UN6GK), UP50YG (UN7Z), UQ50G (UN6QC), UQ50L (UN7LZ) and UQ50P (UN7PL). They have also a special award and the rules can be found at: http://un-dx.ucoz.com/index/yuri_gagarin/0-36 (DXNL 1726 - May 4, 2011 DX Newsletter)

+ Here's your chance to dress up your QSL mailings with new postage stamps honoring Mercury astronaut Alan Shepard, America's first man in space, and NASA's MESSENGER probe, the first spacecraft to orbit Mercury. For more information see: http://tinyurl.com/637uz3n (UniverseToday.com)

+ Something to talk about on 75 meters besides the weather ... Researchers at Northwestern University have created a new kind of cloaking material that can render objects invisible in the terahertz range. Though this design can't translate into an invisibility cloak for the visible spectrum, it could have implications in diagnostics, security, and communication. See: http://tinyurl.com/3m8uehs (spacewar.com)

+ 70MHz is not an amateur band in the USA, but European stations may try to listen for a new 4-Meter Band Radio Science E-skip Trans-Atlantic propagation beacon from the East Coast of the US. Its operating frequency is 70.005 MHz, QTH is FM07fm, CW emissions.
The callsign of the beacon is WE9XUP. Any and all QSL/SWL reports are welcome via email to: WA1ZMS (at) ARRL (dot) NET.
The beacon is scheduled to run 24 hours a day until 1 Sept, 2011.

+ Additional information about the Resourcesat-2, Youthsat, and X-Sat satellites launched on PSLV-C16 rocket on April 20 from India can be found on-line at: http://tinyurl.com/3fh53zt (spacemart.com)

+ A group of Cornell-developed, fingernail-sized satellites may travel to Saturn within the next decade, and as they flutter down through its atmosphere, they will collect data about chemistry, radiation and particle impacts. Three prototypes of these chip satellites, named "Sprite," will be mounted on the International Space Station after the space shuttle Endeavour delivers them on its final flight. The thin,

1-inch-square chips will be mounted to the Materials International Space Station Experiment (MISSE-8) pallet, which will be attached to the space station, exposing them to the harsh conditions of space to see how they hold up and transmit data. More information at: http://tinyurl.com/3fs5ks7 (spacemart.com)

+ Dave, KB1PVH is still looking for operators for CT, NH, NJ for the 13 Original Colonies Special Event. If anyone wants to participate send him an email at kb1pvh@gmail.com. More info on-line at: http://www.13colonies.info/

+ 'CQ EGYPT' Amateur Radio Magazine from The Egyptian Radio Amateurs Society (ERASD). One of their foremost goals is providing educational programs and materials to promote amateur radio and develop the scientific and technical skills of the Egyptian and Arab youth. In this context, ERASD is currently issued an online magazine focused on simplifying science and technology to youth in general, and more particularly in areas related to amateur radio and satellite. The Magazine articles will be a mix of English and Arabic. The May issue is NOW on-line at: http://erasd.net/CQSUAMATEURRADIOMAGAZIN.aspx

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-128.08
Satellite Presentations for May 2011

AMSAT News Service Bulletin 128.08
>From AMSAT HQ SILVER SPRING, MD.
May 8, 2011
To All RADIO AMATEURS
BID: $ANS-128.08

Clint Bradford, K6LCS, will be presenting his "How to Work the FM Amateur Satellites With Your HT" session at the following clubs in the month of May, 2011. ALL are welcome to attend.

Attendees will be shown everything needed to work the FM ham satellites - with a re-occurring theme of, "Most hams already have most of the necessary equipment ... " Attendees should download the four-page tutorial beforehand at ...

http://www.work-sat.com

... and Clint welcomes pre-presentation questions. Call him at 909-241-7666, or send email to clint@clintbradford.com .

Chattanooga Tennessee ARC, 7PM local time
Thursday, May 5, 2011
American Red Cross chapter
3801 McCallie Avenue
Chattanooga TN 37403

Iredell County ARS, 7PM local time
May 12, 2011
Julia's Talley House Restaurant
Highway 21 North
Troutman NC 28166

Palos Verdes ARC, 7:30PM PDT
Wednesday, May 18, 2011
Hesse Park Community Room
23901 Hawthorne Boulevard
Rancho Palos Verdes CA 90275

West Coast ARC, 7PM PDT
Thursday, May 19, 2011
Huntington Beach Senior Outreach Center
1718 Orange Avenue
Huntington Beach CA 92648-2478

Barrow ARC, 7PM local time
Tuesday, May 24, 2011
Barrow Regional Medical Center - 3rd floor conference room
316 North Broad Street
Winder Georgia 30680

[ANS thanks Clint Bradford, K6LCS for the above information and thanks him for his on-going outreach work for amateur radio in space.]

/EX

SB SAT @ AMSAT $ANS-128.09
6th Anniversary of HAMSAT VO 52

AMSAT News Service Bulletin 128.09
>From AMSAT HQ SILVER SPRING, MD.
May 8, 2011
To All RADIO AMATEURS
BID: $ANS-128.09

Mani, VU2WMY, Secretary & Station-In-Charge of the Upagrah Amateur Radio Club VU2URC at the ISRO Satellite Centre in India released the following statement this week:

"It gives us great pleasure and satisfaction to say that 'HAMSAT-VO 52' has completed 6 years of successful operation in orbit. HAMSAT was launched on 5th May 2005 aboard PSLV-C6 from Sriharikotta.

The transponder and the beacon on-board were never been off the air, even for a second from the time they were switched 'ON'. Looking at the health parameters, HAMSAT is still in good condition and we are sure it would provide fruitful services for many more years to come.

On this happy occasion, we express our sincere thanks to the entire ISRO HAMSAT project team for this great feat. Our thanks to AMSAT-India, Kumar VU2BGS and William PEIRAH for their contributions."

[ANS thanks Mani, VU2WMY for the above information]

/EX

SB SAT @ AMSAT $ANS-128.10
Ben Stevenson, W2BXA Silent Key

AMSAT News Service Bulletin 128.10
>From AMSAT HQ SILVER SPRING, MD.
May 8, 2011
To All RADIO AMATEURS
BID: $ANS-128.10

AMSAT has received the sad news of the passing of Ben Stevenson, W2BXA, of Colonia, New Jersey, on May 5, 2011. He was 97. An ARRL member since 1934, Stevenson was also a charter member of the North Jersey DX Association (NJDXA) since 1957, serving as its first president. Stevenson held Satellite DXCC #1, Mixed DXCC #6 (390 countries confirmed) and Phone DXCC #6 (388 countries confirmed). He held WAZ No.1, as well as DXCC on 10 bands, 6 through 160, plus of course OSCAR. At his death he had 225 confirmed on Top Band, all from a 1-acre lot in central New Jersey. He held his call sign continuously for 82 years.

Ray Soifer, W2RS recalls, "Ben was a good friend for nearly 40 years. Ben and I made the first-ever two-way contact by satellite-to-satellite relay in any radio service, using AO-7 and AO-6 in 1975. Ben often said that the secrets of success in DX are persistence and consistency. Not a bad formula for success in life either. I'll miss him."

[ANS thanks the ARRL and Ray Soifer, W2RS for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office. And with that please keep in mind the ham who realized several reasons why he was getting older ... he realized him and his teeth don't sleep together; when he went to try to straighten out the wrinkles in his socks he discovered he wasn't wearing any; he woke up looking like his drivers license picture; and when his wife told him to suck in his gut he realized he had already done so.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

68. ANS-130 AMSAT News Service Special Bulletin ARISSat-1 Update

Newsgroup: rec.radio.amateur.space
Date: 2011-05-10 02:09:44 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <007001cc0eb7$52549260$f6fdb720$@net>
Source record: 494
Cross-posted to: rec.radio.amateur.space,rec.radio.info

SB SAT @ AMSAT $ANS-130.01
AMSAT News Service Special Bulletin - ARISSat-1 Update

AMSAT News Service Bulletin 130.01
>From AMSAT HQ SILVER SPRING, MD.
May 10, 2011
To All RADIO AMATEURS
BID: $ANS-130.01

The ARISSat-1 satellite was intended to be activated in April as part of the 50th anniversary of Yuri Gagarin's famous flight. However, no ground stations reported hearing the satellite. To follow up, the ARISSat-1 team had a teleconference with representatives of RSC-Energia (Russia) and NASA to request a clarification of the events and discuss what happened.

According to RSC-Energia, the battery in ARISSat-1 was only charged once on the ground and was then used for a variety of tests and during the February activation event. It was not recharged prior to the April Yuri Gagarin activity since it can only be charged a limited number of times on the ISS.

The cosmonauts reported that they activated the satellite and confirmed that they heard the signal on the ham radio equipment on board the ISS. Since the battery was nearly depleted of its original charge, they switched the satellite off after six hours of operation in order to prevent over-discharging the battery. The battery was then removed from the satellite and stored separately as per their normal battery handling procedures. For more information on this battery, please see the JAN/FEB 2011 AMSAT Journal.

RSC-Energia reported that their plan is to recharge the battery about three weeks prior to the EVA deployment. This will give the cosmonauts time to reinstall the battery and test the satellite to make sure it is working properly. The EVA deployment is planned for late July of this year.

[ANS thanks AMSAT Vice-President of Engineering, Tony Monteiro, AA2TX for the above information]

/EX

69. Weekly Highlights of Solar and Geomagnetic Activity, 02 - 08 May 2011

Newsgroup: rec.radio.amateur.space
Date: 2011-05-10 21:30:05 UTC
From: SWPC.Webmaster@noaa.gov
Message-ID: <20110510213001.7E55E33C5C@panix2.panix.com>
Source record: 495
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.info

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:Product: Weekly Highlights and Forecasts
:Issued: 2011 May 10 1749 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
# Weekly Highlights and Forecasts
#
Highlights of Solar and Geomagnetic Activity
02 - 08 May 2011

Solar activity began the week at low levels with a C1 x-ray event at
1352 UTC on 02 May from Region 1199 (N18, L=188, class/area Dso/210
on 01 May), after rotating around the west limb. Activity continued
at low levels with another C1 x-ray event at 1052 UTC on 03 May from
Region 1204 (N17, L=47, class/area Cao/130 on 03 May). Activity
decreased to very low levels, with only isolated B-class events
occurring throughout the remainder of the summary period.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at
high levels during most of the summary period.

Geomagnetic field activity began the week ranging between unsettled
to active conditions at mid latitudes, and minor to severe
conditions at high latitudes on 02 May, due to a favorably
positioned coronal hole. The high speed stream effects began prior
to the summary period (29 April) and persisted through 02 May with
solar wind speeds in excess of 640 km/s, and intermittent periods of
negative Bz. Conditions began to subside on 03 May, settling to
predominately quiet conditions with predominately positive Bz,
before solar wind speeds decreased to background velocities near 400
km/s on 04 May. Conditions remained mostly quiet at all latitudes
for the remainder of the summary period.

Forecast of Solar and Geomagnetic Activity
11 May - 06 June 2011

Solar activity is expected to be very low to low. There is a chance
for isolated periods of moderate levels due to the possible
emergence of new regions, the return of old Region 1195 on 13 May,
as well as Regions 1199 and 1202 on 14 May.

No proton events are expected at geosynchronous orbit.
```

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at high levels 11-19 May due to multiple coronal hole high-speed streams. Normal to moderate levels are expected to be predominate from 20-27 May, before elevated wind speeds from another recurrent coronal hole should produce high levels from 28 May until 02 June. Moderate or lower conditions should persist from 03 June until the end of the outlook period.

Geomagnetic field activity is expected to be unsettled to active 11-13 May due to coronal hole high-speed stream effects. Conditions are expected to subside for a day or so before increasing back to mostly unsettled conditions 15-17 May with another coronal hole coming into a favorable position to impact Earth. Conditions are forecasted to be predominately quiet 18-26 May, bar any transient activity, before the next recurrent coronal hole is expected on or around 26 May. Active to minor strorm conditions are possible 27-29 May due to the coronal hole, and lesser effects in the form of mostly unsettled to acive conditions should persist 30-31 May. Mostly quiet conditions are expected 01-05 Jun before the currently geo-effective coronal hole returns to produce unsettled conditions on 06 June.

70. ANS-135 AMSAT News Service Weekly Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2011-05-15 04:42:48 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <002301cc129f$0475f0c0$0d61d240$@net>
Source record: 496
Cross-posted to: rec.radio.amateur.space,rec.radio.info

AMSAT NEWS SERVICE
ANS-135

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

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* AMSAT at Smithsonian Space Day 2011
* Second Call for Speakers for AMSAT UK Colloquium 2011
* 2011 AMSAT Field Day Competition
* ISRO Request For VO-52 HAMSAT User Feedback and Comments
* ARISSat-1 Update
* Satellite Shorts From All Over
* New High For Space Tourism: Lunar Tour

SB SAT @ AMSAT $ANS-135.01
Ready, Set, GO! AMSAT is Ready for Dayton Hamvention

AMSAT News Service Bulletin 135.01
>From AMSAT HQ SILVER SPRING, MD.
May 15, 2011
To All RADIO AMATEURS
BID: $ANS-135.01

The 2011 Dayton Hamvention will be held this year from May 20-22, 2011 and AMSAT will be there. The AMSAT theme for 2011 is "Providing Education Through Amateur Satellites". We will have multiple exhibits of the new AMSAT satellites on display.

You'll find AMSAT at the same spot (Booths 444-449) in the Ball Arena, right across from the ARRL area and just inside the door from the Satellite Demonstration area. Plan to visit all of the AMSAT activities!

AMSAT has planned a number of great activities during the Hamvention. Here is a sample of the events and activities planned for the entire weekend. Links to all of these activities can be found on the AMSAT web page: http://www.amsat.org.

This list has been updated since last week's bulletin!

+ Meet astronaut Doug Wheelock, KF5BOC Friday 1:30-2:30, Saturday, 3:00-4:00 at the AMSAT booth.

+ ARISSat-1 operational prototype will be on display.
o Tune your HT to 145.950 MHz to hear a preview of the FM downlink.
o Watch the demonstration of the ARISSatTLM software receive and display the CW beacon and BPSK telemetry using G6LVB's FUNcube Dongle.

+ Howard Long, G6LVB will be at the AMSAT booth periodically to talk about his FUNcube Dongle (FCD) project. This small (1" x 3") USB software defined radio will receive from 64 - 1700 MHz.

+ CAMSAT delegates will be at AMSAT booth. The CAMSAT delegation consists of Alan, BA1DU; Ken, BH4REQ; Jin, BA4TA; and Michael, BD5RV/4.

+ The ARRL Expo, next door to AMSAT, will have the backup OSCAR-1 satellite on display, resurrected by W1AW Station Manager Joe Carcia, and ARRL Lab Test Engineer Bob Allison, WB1GCM. The CW transmitter is tuned to 145.080 MHz. It will transmit at Part 15 levels with only 10 microwatts of power across a 50 ohm dummy load. A satellite transceiver will be positioned next to the unit that will be used to receive the CW signal. You will hear it transmit "HI HI," just as it did 50 years ago.

+ The fifth annual AMSAT/TAPR Banquet will be Friday night May 20. Just a reminder that the cutoff date for the AMSAT-TAPR dinner at Dayton is Monday May 16th. You can register at the AMSAT Store website: http://www.amsat-na.com/store/item.php?id0158 We will NOT be selling tickets at the booth. Our new Banquet speaker will be Bob Bruninga, WB4APR speaking on "Power from Space and in your Shack". David Rowe, VK5DGR is unable to attend. Read about Bob's presentation on the AMSAT at Dayton webpages at: http://www.amsat.org/amsat-new/hamvention/2011/Banquet.php

+ AMSAT Thursday Night Get-together at Tickets Pub & Eatery.

+ Dave Jordan, AA4KN will speak about ARISS at the Teachers Forum at 1000 on Friday in Room 3. The title of his talk "Space Communications from the Classroom-ARISS and AMSAT". Dave will describe as how to apply for an ARISS contact at your school and find out how amateur radio satellites can be accessed and used for classroom projects."

+ The AMSAT Forum will be on Saturday May 21 1115-1330 in Forum Room 5 on Saturday. Moderated by Alan Biddle, WA4SCA you will have a chance to hear and see the latest news of amateur radio in space.

o AMSAT President Barry Baines, WD4ASW will present an AMSAT Status Report
o Alan Kung, BA1DU, CEO of AMSAT-China, will discuss the activities of AMSAT-China.

o Project Manager for ARISSat-1, Gould Smith, WA4SXM, will talk about its operation aboard the ISS, and the planned deployment and operations this summer.
o Tony Monteiro, AA2TX, will discuss the design and status of Project-FOX.
o Alex Harvilchuck, N3NP, will present NextGen CubeSat Program Update.

+ NASA Astronaut Doug Wheelock, KF5BOC is scheduled to speak from 1315-1415 on Saturday in Forum Room 3. Doug is attending Hamvention as guest of ARRL and AMSAT. According to the Forum listing, "Doug will share his experiences about space flight and using Amateur Radio in space."

+ Lou McFadin, W5DID is scheduled to speak at the "Introduction to Digital-ATV" Forum, scheduled on Saturday from 1530-1700 in Forum Room 2. The title of his talk is "DATV Space Station Project".

+ Satellite demonstrations will take place outside the Ball Arena entrance Friday, Saturday and Sunday.

Be sure and come by the booth and renew your membership and receive an AMSAT multiblade screwdriver as a premium!

The AMSAT leadership team will be at Hamvention and invite you to take advantage of this opportunity to interact with both board members and senior officers. If you have issues or concerns that you wish to express here is your chance to do so.

[ANS thanks AMSAT HQ for the above information]

/EX

SB SAT @ AMSAT $ANS-135.02
AMSAT at Smithsonian Space Day 2011

AMSAT News Service Bulletin 135.02
>From AMSAT HQ SILVER SPRING, MD.
May 15, 2011
To All RADIO AMATEURS
BID: $ANS-135.02

Dave Taylor, W8AAS reported a very successful AMSAT presence at Space Day 2011 held at the Smithsonian National Air and Space Museum on the Mall in Washington DC on May 7. According to the ARISS status report, the average crowd in the Museum on this Saturday in May is about 30,000.

Featured displays included prototype picosats, cubesats, space hardware including laser reflectors for the kids to try out. A crowd of 250 people watched the ARISS contact as six youngsters asked questions. Each one had three questions to ask and we got through all of them with time to thank Cady Coleman, KC5ZTH, give her a round of applause, and hear her response. Mark Steiner, K3MS handled the ARISS uplink/downlink

from NASA Goddard amateur radio station K6DUE.

Prior to the contact, former Payload Specialist Greg Linteris spoke to the crowd. Greg had trained with Cady for one of his flights. He was also on one of the last SAREX missions (STS-94).

This year a group from Thomas Jefferson High School for Science and Technology brought a working prototype of their Cubesat. They demonstrated with the prototype how one can uplink a text message and their Cubesat converts the text message to speech and transmits the speech on the downlink. They are manifested on a SpaceX Falcon 9 launch for early next year. Orbital Sciences has been providing them with assistance for the project.

At Space Day a new version of the AMSAT-OSCAR slide show was run. A link to a PDF version of the slide show has been added to the AMSAT web page. (see http://www.amsat.org).

Thanks to all who helped out:
Dave Taylor, W8AAS
Perry Klein, W3PK
Dick Daniels, W4PUJ
Mark Kanawati, N4TPY
Samudra Haque, N3RDX
Don Sylvain, WA3WOD from the Smithsonian Amateur Radio Club NN3SI
Mark Steiner, K3MS from NASA Goddard K6DUE
Bob McCown, N3IYI from NASA Goddard K6DUE

Photos will be published in the AMSAT Journal.

[ANS thanks Perry Klein, W3PK and Dave Taylor W8AAS for the above information]

/EX

SB SAT @ AMSAT $ANS-135.03
Second Call for Speakers for AMSAT UK Colloquium 2011

AMSAT News Service Bulletin 135.03
>From AMSAT HQ SILVER SPRING, MD.
May 15, 2011
To All RADIO AMATEURS
BID: $ANS-135.03

This is the second call for speakers for the AMSAT-UK Colloquium 2011 which will be held at the Holiday Inn, Guildford, UK (same venue as in 2010) from *Sat 30 Jul to Sun 31 July 2011*

AMSAT-UK invite speakers, about amateur radio, space and associated activities, for this event.

Offers of talks should be sent *ONLY* to G4DPZ, via the following routes:

e-mail: david.johnson AT blackpepper.co.uk

SnailMail: QTHR from http://www.QRZ.com

Likewise if anyone knows of a good speaker, please send contact and other information to G4DPZ.

[ANS thanks Dave, G4DPZ for the above information]

/EX

SB SAT @ AMSAT $ANS-135.04
2011 AMSAT Field Day Competition

AMSAT News Service Bulletin 135.04
>From AMSAT HQ SILVER SPRING, MD.
May 15, 2011
To All RADIO AMATEURS
BID: $ANS-135.04

AMSAT Director of Awards, Bruce Paige, KK5DO says, "It's that time of year again: Summer and Field Day!"

Each year the American Radio Relay League (ARRL) sponsors Field Day as an emergency preparedness exercise. The event takes place during a 24-hour period on the fourth weekend of June. For 2011 the event takes place during a 27-hour period from 1800 UTC on Saturday June 25, 2011 through 2100 UTC on Sunday June 26, 2011. Those who set up prior to 1800 UTC on June 25 can operate only 24 hours.

The Radio Amateur Satellite Corporation (AMSAT) promotes its own version of Field Day for operation via the amateur satellites, held concurrently with the ARRL event.

Bruce advises, "If you are considering ONLY the FM voice satellites like AMSAT-OSCAR 16, AMRAD-OSCAR-27, SaudiSat-Oscar-50, or AMSAT-OSCAR-51 for your AMSAT Field Day focus. Don't, unless you are simply hoping to make one contact for the ARRL rules bonus points."

The congestion on FM LEO satellites was so intense in prior years that we must continue to limit their use to one-QSO-per-FM-satellite. This includes the International Space Station. You will be allowed one QSO if the ISS is operating Voice. You will also be allowed one digital QSO with the ISS or any other digital, non-store-and-forward, packet satellite (if operational).

Please refer to these links for the full document of the AMSAT Field Day rules:
http://www.amsat.org/ (link on AMSAT.org front page to PDF file)
And, an alternative site is:
http://www.amsatnet.com/2011fd.doc (MS-Word Doc File)
http://www.amsatnet.com/2011fd.pdf (PDF File)

These documents also cover the message exchange format, scoring requirements, reporting requirements, station classes, etc.

[ANS thanks AMSAT Director of Awards, Bruce Paige, KK5DO for the above information]

/EX

SB SAT @ AMSAT $ANS-135.05
ISRO Request For VO-52 HAMSAT User Feedback and Comments

AMSAT News Service Bulletin 135.05
>From AMSAT HQ SILVER SPRING, MD.
May 15, 2011
To All RADIO AMATEURS
BID: $ANS-135.05

The VO-52 HAMSAT community has received a request from the Indian Space Research Organisation (ISRO), in Bangalore for user reports on the satellite's performance. Shri. T. Parimalarangan, HAMSAT Operations Director, ISRO Tracking, Ranging and Command Centre (ISTRAC) asks that feedback be sent via e-mail directly to him at: tprangan@istrac.org. Mani, VU2WMY, Secretary & Station-In-Charge at the Upagrah Amateur Radio Club VU2URC at the ISRO Satellite Centre requests a copy to be sent to him at: wmy@isac.gov.in.

ISTRAC/ISRO is interested in gathering VO-52 data with responses to these questions:

1. Qualitative/quantitative performance report. (Signal strength telemetry observations, availability).

2. Observation on the quality of services from the launch to present (trend of the onboard behaviour as seen from the ground).

3. Comparison with other amateur radio satellites.

4. Positive/negative aspects of HAMSAT.

The data will be used to generate a HAMSAT Performance Report on the 6th anniversary since launch. ISRO values direct feedback from the user community.

[ANS thanks Mani, VU2WMY for the above information]

/EX

SB SAT @ AMSAT $ANS-135.06
ARISSat-1 Update

AMSAT News Service Bulletin 135.06
>From AMSAT HQ SILVER SPRING, MD.
May 15, 2011
To All RADIO AMATEURS
BID: $ANS-135.06

The ARISSat-1 satellite was intended to be activated in April as part of the 50th anniversary of Yuri Gagarin's famous flight. However, no ground stations reported hearing the satellite. To follow up, the ARISSat-1 team had a teleconference with representatives of RSC-Energia (Russia) and NASA to request a clarification of the events and discuss what happened.

According to RSC-Energia, the battery in ARISSat-1 was only charged once on the ground and was then used for a variety of tests and during the February activation event. It was not recharged prior to the April Yuri Gagarin activity since it can only be charged a limited number of times on the ISS.

The cosmonauts reported that they activated the satellite and confirmed that they heard the signal on the ham radio equipment on board the ISS. Since the battery was nearly depleted of its original charge, they switched the satellite off after six hours of operation in order to prevent over-discharging the battery. The battery was then removed from the satellite and stored separately as per their normal battery handling procedures. For more information on this battery, please see the JAN/FEB 2011 AMSAT Journal.

RSC-Energia reported that their plan is to recharge the battery about three weeks prior to the EVA deployment. This will give the cosmonauts time to reinstall the battery and test the satellite to make sure it is working properly. The EVA deployment is planned for late July of this year.

[ANS thanks AMSAT Vice-President of Engineering, Tony Monteiro, AA2TX for the above information]

/EX

SB SAT @ AMSAT $ANS-135.07
Satellite Shorts From All Over

AMSAT News Service Bulletin 135.07
>From AMSAT HQ SILVER SPRING, MD.
May 15, 2011
To All RADIO AMATEURS
BID: $ANS-135.07

+ Congratulations to Paolo Nespoli IZ�JPA! Paolo now has the record for the number of contacts during a single flight at 42. He is part of Expedition 26/27).

+ AMSAT-UK is now active on Twitter as @AMSAT_UK. Keep up to date with all the AMSAT-UK news and updates.

+ MILESTONE! On Saturday May 7, Bob Herrell, AJ5C, acheived his 5,000th amateur radio satellite contact when he worked Kerry, WC7V on the FO-29 satellite using SSB. Bob posted a video at: http://www.youtube.com/watch?v�6gM7K7Kv0. The Southgate ARC news site also carried the story:

http://www.southgatearc.org/news/may2011/5000_sat_qsos.htm
Bob, congratulations on a remarkable acheivement.

+ SA AMSAT said that its Space Symposium 2011 will go full steam ahead on Saturday 21 May. The auditorium at Radiokop will be the venue and the SARL National Amateur Radio Centre being used for refreshment breaks and lunch. The new arrangement has substantially reduced the registration fee to R75 for SARL and SA AMSAT members if booked before 15 May 2011. Students and scholars will enter free if a student card or scholar ID is submitted at the time of Registration. The conference will be opened by the CEO of the South African National Space Agency, Sandile Malinga. John Willescroft, ZS6EF, will demonstrate the development of a totally new concept which allows a solar panel to be released from SAiSAT once in Space. For full details, registration forms and programme, visit: http://www.amsatsa.org.za

+ Spaceflightnow.com has posted a movie capturing the Atlas 5 rocket's launch over the weekend that successfully deployed the first in a new generation of missile warning satellites for the U.S. military. Watch on-line at: http://spaceflightnow.com/atlas/av022/video.html

+ OY, FAROE ISLANDS. Operators Hans/PA0VHA, Steef/PA2A and Wim/PA2AM will be active as OY/homecall from Skaelingur, Streymoy Island, in the Faroes (EU-018), between May 22nd and June 3rd. Activity will be on all bands using CW and RTTY. Also, look for activity on 6 and 4 meters, and PA2AM will also be on AO-51 satellite. Streymoy Island has a population of 11 and some sheep! QSL via their home callsigns. ADDED NOTE: This team also plans activity from Market Reef later this year. (Ohio/Penn DX Bulletin)

+ The next Hudson Valley Satcom Nets "HV Satcom" Net ia scheduled for May 26, at 8PM EDT (UTC-4) on the 146.970 MHz repeater, (Pl 100), and also on Echolink node N2EYH-L. More info: http://www.hvsatcom.org (Stu, WA2BSS)

+ Technical papers are solicited for presentation at the 30th Annual ARRL and TAPR Digital Communications Conference to be held September 16-18, 2011 in Baltimore, Maryland. These papers will also be published in the Conference Proceedings (you do NOT need to attend the conference to have your paper included in the Proceedings). The submission deadline is July 31, 2011. Please send papers to:
Maty Weinberg, ARRL, 225 Main St, Newington, CT 06111 or you can make your submission via e-mail to: maty@arrl.org.

+ Squrl may be a useful tool for storing your on-line videos. Its primary function is to help visitors collect interesting videos online for later "consumption". First-time visitors will need to complete a short registration, and they can get started saving videos from a range of sources. Visitors can also organize playlists, and then email them to friends and colleagues. This version is compatible with all operating systems. See: http://www.squrl.com/

+ AMSAT's Keeper of the Keps, Ray Hoad, WA5QGD says he has updated the name designation in the AMSAT KEPs for FAST1 as FO-69 and FAST2 as FO-70. This matches the OSCAR designators assigned to these satellites earlier this year.

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-135.08
New High For Space Tourism: Lunar Tour

AMSAT News Service Bulletin 135.08
>From AMSAT HQ SILVER SPRING, MD.
May 15, 2011
To All RADIO AMATEURS
BID: $ANS-135.08

This week MoonDaily.com posted a story, "Space Adventures proposes modified Soyuz TMA for Lunar tourists" which follows below:

U.S. Space Adventures, the only company currently offering tourist orbital spaceflights, has offered to equip the Russian Soyuz TMA spaceship with additional living space for eight-day commercial flights around the moon, the company said late on Thursday.

The firm announced on April 28 that it would offer moon orbit tourist trips, albeit with a price tag of around $150 million per seat.

"After consultation with Rocket Space Corporation Energia (the Soyuz TMA design authority), modifications to the Soyuz TMA configuration have been agreed upon. The most important is the addition of a second habitation module to the Soyuz TMA lunar complex," Space Adventures said.

A moon tour mission would include separate launches of a Soyuz and the upper stage, their docking in a low Earth orbit, a flight to the moon with the upper stage engine, the separation of Soyuz from the upper stage rocket, an orbit around the moon, return to Earth and landing.

Space Adventures is currently selecting candidates for the next space tour together with the Russian Federal Space Agency.

The company quoted Vice Chairman Richard Garriott as saying it had sold one of the two seats for the flight and anticipated that the launch would occur in 2015.

The CEO of Russia's Gagarin Research and Test Cosmonaut Training Center Sergei Krikalyov has said the center was ready to train a professional cosmonaut and a space tourist for the future flight.

This story is on the MoonDaily.com web site, see:
http://tinyurl.com/3zn8xhl

[ANS thanks MoonDaily.com for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office. And with that, please keep in mind the ham who was a physics professor. His lectures could be quite animated and exciting. He would jump off of the desk or fling frisbees to illustrate his point. One day in class he was spinning on an office chair holding weights in each hand when he lost his balance and tumbled into the first row. He apologized to his class for going off on a tangent.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

71. Weekly Highlights of Solar and Geomagnetic Activity, 09 - 15 May 2011

Newsgroup: rec.radio.amateur.space
Date: 2011-05-17 21:30:06 UTC
From: SWPC.Webmaster@noaa.gov
Message-ID: <20110517213001.831B533C5F@panix2.panix.com>
Source record: 497
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.info

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:Product: Weekly Highlights and Forecasts
:Issued: 2011 May 17 1420 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
# Weekly Highlights and Forecasts
#
Highlights of Solar and Geomagnetic Activity
09 - 15 May 2011

Solar activity was at very low to low levels with isolated B and
C-class flares observed. Two CMEs on the earthward side of the sun
were observed during the period. The first CME was associated with a
C5 x-ray event at 09/2059 UTC from a region rounding the NE limb. It
appeared to be the return of old Region 1193 (N17, L=266). This
event produced a partial-halo CME with an estimated plane-of-sky
velocity of 1225 km/s, based on SOHO/LASCO imagery. The second CME
was associated with a B8 x-ray event at 11/0243 UTC, likely
associated with a filament eruption between Region 1205 (N14, L=036,
class/area Bxo/010 on 03 May) and Region 1207 (N24, L=007,
class/area Bxo/020 on 05 May). Associated with the second CME was a
Type II radio sweep (632 km/s). Based on SOHO/LASCO imagery, the
estimated plane-of-sky velocity was 420 km/s. The rest of the disk
was populated with numerous small, magnetically simple spot groups.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at
high levels on 09 May and at moderate levels 10 - 15 May.

Geomagnetic activity ranged from quiet to active levels during the
period. Activity was at quiet levels on 09 May. Levels increased to
quiet to unsettled, with isolated active periods on 10 - 11 May.
This increase in activity was associated with the onset of a CH HSS.
Activity decreased to quiet levels from 12 - 13 May before
increasing to unsettled to active conditions midday on 14 May with
the onset of another CH HSS. Conditions were mostly quiet to
unsettled on 15 May as weak HSS effects continued.

Forecast of Solar and Geomagnetic Activity
18 May - 13 June 2011

Solar activity is expected to be at very low to low levels through
the forecast period. There is a slight chance for isolated periods
```

of moderate levels due to the possible emergence of new regions as well as the return of old regions.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at moderate to high flux levels during 18 - 20 May, normal to moderate flux levels on 21 - 26 May and back to moderate to high flux levels 27 - 29 May. This forecast is based on anticipated recurrent CH HSS influences.

Geomagnetic activity is expected to be at predominately quiet to unsettled levels on 17 May due to continued recurrent CH HSS effects. Activity is expected to decrease to mostly quiet levels during 18 - 25 May. The field is expected to be under the influence of a recurrent negative polarity CH HSS during 26 - 30 May. During this period, quiet to unsettled levels are expected, with isolated active periods on 27 May. Mostly quiet conditions are forecasted to return 31 May - 5 June, before another CH HSS is expected to return. Mostly quiet to unsettled conditions are expected 6 - 7 June from this small feature, before returning to quiet conditions 8 - 10 June. Mostly unsettled to active conditions are expected to return 11 - 13 June as HSS effects from the CH we are currently under the influence of should return.

72. ANS-142 AMSAT News Service Weekly Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2011-05-23 19:15:37 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <001a01cc197d$cc944fe0$65bcefa0$@net>
Source record: 498
Cross-posted to: rec.radio.amateur.space,rec.radio.info

AMSAT NEWS SERVICE
ANS-142

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* AMSAT-NA Board of Directors Nominations Due by June 15th
* The May 2011 issue of the AMSAT-INDIA newsletter is now available
* Masten Signs Contract With Space Florida For Demonstration Launches
* Satellite Shorts From All Over
* ARISS Status - 16 May 2011

SB SAT @ AMSAT $ANS-142.01
AMSAT-NA Board of Directors Nominations Due by June 15th

AMSAT News Service Bulletin 142.01
From AMSAT HQ SILVER SPRING, MD.
May 22, 2011
To All RADIO AMATEURS
BID: $ANS-142.01

It is time to submit nominations for the upcoming open seats on the AMSAT-NA Board of Directors. The deadline is June 15th. A valid nomination requires either one Member Society, or five current individual members in good standing, to nominate an AMSAT member for the position.

Four director's terms expire this year:

Barry Baines, WD4ASW
Alan Biddle, WA4SCA
Drew Glasbrenner, KO4MA
Tony Monteiro, AA2TX

The four candidates receiving the highest number of votes will be seated as full Board members for two year terms. The two candidates receiving the next highest number of votes will be seated as alternate Board members for one year terms.

Beginning this year, in addition to traditional submissions of written nominations which remains unchanged and is the preferred method, initial nominations may be made by electronic means. These include e-mail, FAX, or electronic image of a petition. Electronic petitions should be sent to MARTHA@AMSAT.ORG or faxed to 301-608-3410. Written nominations, consisting of names, calls, and individual signatures, should be mailed to:

AMSAT-NA
850 Sligo Ave #600
Silver Spring, MD, 20910

No matter what method is used, petitions MUST arrive no later than June 15th at the AMSAT-NA office. If the nomination is a traditional written nomination, no other action is required. If it is other than this, i.e. electronic, a verifying traditional written petition MUST be received at the AMSAT-NA office at the above address within 7 days following the close of nominations on June 15th. ELECTRONIC SUBMISSIONS WITHOUT THIS SECOND, WRITTEN VERIFICATION ARE NOT VALID UNDER THE EXISTING AMSAT-NA BYLAWS.

Alan Biddle
WA4SCA
AMSAT Corporate Secretary

[ANS thanks Alan, WA4SCA, for the above information]

/EX

SB SAT @ AMSAT $ANS-142.02
The May 2011 issue of the AMSAT-INDIA newsletter is now available

AMSAT News Service Bulletin 142.02
From AMSAT HQ SILVER SPRING, MD.
May 22, 2011
To All RADIO AMATEURS
BID: $ANS-142.02

Topics in this month's edition include:
- HAMSAT (VO-52) Completes Six years in orbit.
- Update- Meeting with distinguished guests from ISRO at AMSAT INDIA ground station.
- Update on the CubeSat Communication system project by AMSAT INDIA.
- High Intercept Low Noise Amplifier with GaAs pHEMT MMIC By: Goran Popovic AD6IW
- News from AMSAT organizations around the world

Download the newsletter from
http://amsatindia.org/Newsletter/AMSATINDIA-News-May_2011.pdf

Previous issues are available at:
http://www.amsatindia.org/Newsletter/

Regards

Nitin [VU3TYG]
Secretary, AMSAT India
vu3tyg@amsatindia.org
www.amsatindia.org

[ANS thanks Nitin, VU3TYG, for the above information]

/EX

SB SAT @ AMSAT $ANS-142.03
Masten Signs Contract With Space Florida For Demonstration Launches

AMSAT News Service Bulletin 142.03
From AMSAT HQ SILVER SPRING, MD.
May 22, 2011
To All RADIO AMATEURS
BID: $ANS-142.03

Masten Space Systems and Space Florida announced contract under which Masten will perform a series of demonstration flights of a Vertical Takeoff Vertical Landing (VTVL) reusable suborbital launch vehicle from Launch Complex 36 at Cape Canaveral Air Force Station.

Under the contract, Masten will complete multiple flights. These operations will serve as a pathfinder to assist Space Florida in developing operational requirements for VTVL vehicles, recommending the optimum operational scenario, and determining the program schedule to achieve launch capability as soon as possible.

The upcoming flights will also enable Masten to fully evaluate Florida, CCAFS, and LC-36 as a base for the company's flight operations group. "We look forward to successfully completing our demonstration flights and better understanding what is needed for operations in Florida," said David Masten. "Space Florida and the 45th Space Wing have been very helpful as we continue to develop operational concepts for Florida."

[ANS thanks Masten Space Systems for the above information]

/EX

SB SAT @ AMSAT $ANS-142.04
Satellite Shorts From All Over

AMSAT News Service Bulletin 142.04
From AMSAT HQ SILVER SPRING, MD.
May 22, 2011
To All RADIO AMATEURS
BID: $ANS-142.04

+ The new edition of the popular SolderSmoke amateur radio podcast is now available. One of the topics on this edition includes the Space Station Packet Beacon. You can listen on-line at:
http://soldersmoke.com/soldersmoke134.mp3

+ Congratulations to Ben, KC0PCQ on his first satellite contacts.
Ben wrote, "I've been grinning ear-to-ear for a little while now
that I have my first satellite contacts completed. Thank you to
my #1 - K8YSE, #2 - AC0RA, #3 - W7JPI, #4 - WA4NV, and #5 - K8TL.

+ Congratulations to Patrick WD9EWK/VA7EWK on being awarded satellite
VUCC #210!

+ On-line photos and videos of the Endeavor Shuttle launch can be
found in many places. The first two links here are from amateur radio
operators who were at the launch:
Ken, KK0HF got these photos from the press area:
http://radiogeek.us/NASA2/
Bobby, KF4GTA was also in the press area and posted these photos:
http://bit.ly/jvdhNv
Launch videos can be viewed at the UniverseToday site:
http://tinyurl.com/65wou9s

+ The next Hudson Valley Satcom Nets "HV Satcom" Net ia scheduled for
May 26, at 8PM EDT (UTC-4) on the 146.970 MHz repeater, (Pl 100),
and also on Echolink node N2EYH-L. More info: http://www.hvsatcom.org
(Stu, WA2BSS)

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SB SAT @ AMSAT $ANS-142.05
ARISS Status - 16 May 2011

AMSAT News Service Bulletin 142.05
From AMSAT HQ SILVER SPRING, MD.
May 22, 2011
To All RADIO AMATEURS
BID: $ANS-142.05

1. Upcoming School Contacts

The ARISS team continues to work on the school contact schedule.
The next contacts to be held are dependent on the launch date of
STS-134.

2. Recent ARISS Contacts

On Monday, May 9 students from St. Michael School in Schererville,
Indiana and astronaut Cady Coleman, KC5ZTH on the ISS took part in
an ARISS contact. The school partners with the Challenger Learning
Center in Hammond, Indiana and provided students with this ARISS
contact to highlight its science curriculum. Approximately 430 stu-
dents, teachers and guests watched and listened as 16 questions about
life in space were asked and answered. Contact video was streamed
on the internet and representatives from three newspapers covered the
event. The Times posted an article. See:
http://www.nwitimes.com/news/local/lake/schererville/article_1a1b5c1d-
0f5d-5f33-b9ae-25bad21e6e9e.html

Mount Carmel Academy students from Houston, Texas participated in an ARISS contact with on-orbit astronaut Ron Garan, KF5GPO on Tuesday, May 10 via telebridge station ON4ISS in Belgium. This was Garan's first ARISS contact and he handled nine questions, providing comprehensive answers. The contact complemented lessons on the International Space Station as well as amateur radio and Clear Lake Amateur Radio Club provided follow-on educational support. News of the ARISS contact reached
approximately 580,000 households through the Comcast Channel 18 simulcast
of Houston Independent School District news andthrough KUHF, the local PBS radio station. See:
http://app1.kuhf.org/houston_public_radio-news-display.php?articles_id 1305066316

Students from Tecnico Industriale Statale "Gerolamo e Margherita Montani," in Fermo, Italy established an ARISS contact with Paolo Nespoli, IZ0JPA on Thursday, May 12. The contact highlighted the school curriculum
which focuses on Chemistry, Biotechnology, Electronics, Computer Science,
Telecommunications and Mechanics. Nespoli fielded 21 questions posed by the youth over two ISS passes. The event was attended by nearly 300 students and visitors and video was streamed over the internet.

An ARISS contact was held between students from Primary School Pasquale Luisi and Secondaria Di 1° Grado Virgilio, both located in Foggia, Italy,
and ISS astronaut Paolo Nespoli on Saturday, May 14. An audience of 200 attended the event and listened as Nespoli spoke to the students over two consecutive ISS passes, answering a total of 18 questions. Through this contact and related studies, students were introduced to amateur radio, astronauts and the International Space Station.

[ANS thanks Carol, KB3LKI, for the above information]

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In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits.

Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

73. Weekly Highlights of Solar and Geomagnetic Activity, 16 - 22 May 2011

Newsgroup: rec.radio.amateur.space
Date: 2011-05-24 21:30:10 UTC
From: SWPC.Webmaster@noaa.gov
Message-ID: <20110524213001.E5EE533C6C@panix2.panix.com>
Source record: 499
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.info

```
:Product: Weekly Highlights and Forecasts
:Issued: 2011 May 24 1842 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
# Weekly Highlights and Forecasts
#
Highlights of Solar and Geomagnetic Activity
16 - 22 May 2011

Solar activity was at very low to low levels, with predominantly
B-class flares. A C1 flare occurred at 18/1259 UTC from Region 1218
(N16, L=168, class/area Bxo/010 on 19 May), and a long duration C2
flare occurred at 18/1830 UTC from Region 1208 (N12, L=318,
class/area Dso/100 on 09 May). A long duration B3 flare occurred at
19/0436 UTC which was associated with a filament eruption centered
near N20W25.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at
normal to moderate levels.

Geomagnetic field activity was at quiet to active levels, with an
isolated minor storm levels at high latitudes during 16-17 May.
During this time, wind speeds ranged from 428-610 km/s, while Bt
ranged from 11 to 2 nT, and Bz ranged from -6 to 7 nT. The increase
in activity was due to a favorably positioned coronal hole
high-speed stream. Activity decreased to quiet levels for the rest
of the period.

Forecast of Solar and Geomagnetic Activity
25 May - 20 June 2011

Solar activity is expected to be very low, with a slight chance for
low levels between 25-30 May. Activity is expected to increase to
very low to low levels during the rest of the period, when old
Region 1208 returns during the rest of the period.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is
expected to be at normal to moderate levels. High levels are
expected during 29 May - 06 June.
```

Geomagnetic field activity is expected to be at quiet levels on 25 May. Activity is expected to increase to quiet to active levels, with isolated minor storm levels at high latitudes during 26-30 May, due to a recurrent coronal hole high-speed stream. Activity is expected to decrease to predominantly quiet levels during 31 May - 10 June. Activity is expected to increase to during 11 - 12 June due to a recurrent coronal hole high-speed stream. Quiet levels are expected for the rest of the period.

74. ANS-149 AMSAT News Service Weekly Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2011-05-29 13:52:03 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <001301cc1e07$8fab3bf0$af01b3d0$@net>
Source record: 500
Cross-posted to: rec.radio.amateur.space,rec.radio.info

AMSAT NEWS SERVICE
ANS-149

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* 70 CM Spectrum in HR 607 Safe After Meeting With Congressman King
* The DARA Matching Gift Challenge
* Cornell University Chip Satellite Team Invites Ham Radio Collaboration
* Awards Manager for AMSAT Marks 10 Years
* Satellite Shorts From All Over
* ARISS Status - 23 May 2011
* Nine New Cubesats
* UK Coloqium
* New ARISS School Procedure
* AO-51 Partial Operation Restored

SB SAT @ AMSAT $ANS-149.01
70 CM Spectrum Safe

AMSAT News Service Bulletin 149.01
From AMSAT HQ SILVER SPRING, MD.
May 29, 2011
To All RADIO AMATEURS
BID: $ANS-149.01

70 CM Spectrum in HR 607 Safe After Meeting With Congressman King

A delegation of Amateur operators led by Peter Portanova, WB2OQQ, AMSAT NY Area Coordinator, from the Long Island/New York City area met with Congressman Peter T. King (R-NY) on May 19 to discuss his recent proposed legislation, H.R. 607, and its impact on Amateur Radio. Peter, who resides in King's Congressional District, worked for many months with only assistance from his local Town of Massa-pequa government to arrange this important meeting.

The delegation included Mike Lisenco, N2YBB, ARRL Section Manager for New York City/Long Island (NLI), Peter Portanova, WB2OQQ, NLI

Local Government Liaison and AMSAT NY Area Coordinator, George Tranos, N2GA, NLI State Government Liaison (SGL), and Jim Mezey, W2KFV, NLI ARES Section Emergency Coordinator (SEC).

Portanova, Lisenco, Mezey, and Tranos spoke about the importance of Amateur Radio emergency communications and Portanova, who is the Radio Amateur Satellite Corporation (AMSAT) NY Area Coordinator, addressed the amateur satellites and its contributions to Science, Technology, Engineering, Mathematics (STEM) education and disaster communication. Barry Baines, WD4ASW, President of AMSAT, prepared an important letter that was delivered to Congressman King, by Peter, addressing his concerns of HR 607. Mr. Baines also contributed and shared a great deal of information to Peter to allow him to make a successful presentation of AMSAT's activities to Congressman King.

Congressman King said that he fully understands and appreciates the importance of Amateur Radio and the Amateur Satellite Service for the contributions it provides to the community, and that he would see to the modification of the bill so that the 420-440 MHz band would be excluded from the spectrum to be auctioned. The Congressman was very receptive to the group and listed Peter Portanova as point of contact.

"The Congressman went on to explain that it was never his intention to remove the 70 centimeter band from Amateur use. He further asked us to 'get the word out' and inform the Amateur Radio community that 70 centimeters is not in jeopardy", said Portanova.

Portanova learned on May 26 that Congressman King has requested the House Committee on Energy and Commerce to remove section 207, the section covering the auction of the 420-440 MHz and 450-470 MHz spectrum, from the bill. Sub-Committee Chairman Rep. Walden agreed so the threat to amateur radio access to 70 cm spectrum is no longer an issue.

The ARRL has reported that the Senate companion bill S-1040 with similar objectives as H.R. 607 does not call for auctioning any portions of Amateur Radio spectrum.

AMSAT President Barry Baines, WD4ASW noted, "Peter is to be commended for taking the initiative to arrange for this meeting with his Congressman on behalf of AMSAT. Using his contacts within the Town of Massapequa, NY government, Peter made the appropriate queries to schedule the meeting and then sought input from AMSAT to maximize the quality of information presented. He also invited amateur radio operators to the meeting with ties to the ARRL as well. His initiative and thorough preparation for the meeting resulted in a very positive experience as well as enlightened Rep. King to the significant benefit of amateur radio in space and the wonderful work done by AMSAT volunteers and others in the areas of technology and education outreach."

(Editor Note: AMSAT President Barry Baines, WD4ASW letter to Congressman King can be read on a link at the AMSAT web site http://www.amsat.org).

[ANS thanks Peter Portanova, WB2OQQ and AMSAT President Barry Baines WD4ASW for the above information]

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SB SAT @ AMSAT $ANS-149.02
The DARA Matching Gift Challenge

AMSAT News Service Bulletin 149.02
From AMSAT HQ SILVER SPRING, MD.
May 29, 2011
To All RADIO AMATEURS
BID: $ANS-149.02

The DARA Matching Gift Challenge

The Dayton Amateur Radio Association (DARA) has announced a fund raising challenge for AMSAT whereby they will match on a 1:3 basis up to $5,000.00 for donations made in 2011. That is, for every $3.00 that AMSAT raises, DARA will provide $1.00 up to a maximum of $5,000 donated by DARA.

AMSAT kicked off the fundraising campaign at the Hamvention, where donations began count against this goal. Please consider making a donation to AMSAT at Hamvention or anytime this Spring as we strive to meet this goal.

We appreciate DARA's support for AMSAT and see this as an opportunity for donors to increase the impact of their donations by taking advantage of this matching program.

[ANS thanks AMSAT Headquarters for the above information]

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SB SAT @ AMSAT $ANS-149.03
Cornell University Chip Satellite Team Invites Ham Radio Collaboration

AMSAT News Service Bulletin 149.03
From AMSAT HQ SILVER SPRING, MD.
May 29, 2011
To All RADIO AMATEURS
BID: $ANS-149.03

Cornell University Chip Satellite Team Invites Ham Radio Collaboration

A group of Cornell University-developed, fingernail-sized satellites may travel to Saturn within the next decade, and as they flutter down through its atmosphere, they will collect data about chemistry, radiation and particle impacts.

Three prototypes of these chip satellites, named "Sprite," were mounted on the International Space Station during a recent spacewalk. The thin, 1-inch-square chips are mounted to the external Materials International Space Station Experiment (MISSE-8) pallet, exposing them to the harsh conditions of space to see how they hold up and transmit data.

Zac Manchester at Cornell University explained that the chips transmit as beacons with 10 milliwatts of RF power at 902 MHz using MSK modulation (minimum-shift keying) with a chipping rate of 50 kbps. The Cornell team invites AMSAT satellite operators to collaborate with this experiment to determine conditions in which the low-power signal has been detected on the ground.

The Cornell ground station consists of a 18 dBi yagi with a GNU Radio and USRP receiver (http://www.ettus.com/products). A significant challenge is that the MISSE-8 pallet the chips are on is mounted on the anti-nadir side of the space station, facing away from the earth. The team is hoping to be lucky to catch some kind of reflection off the ISS structure.

Beyond being able to detect the signal on Earth, decoding the message requires signal processing. The chips all transmit on the same frequency, each with it's own PRN code. The Cornell team uses these codes to differentiate each one, as well as to provide signal processing gain. At Cornell, data is being recorded and post-processed with a standard PC.

To track these chip satellites just use the ISS keplerian elements because they are mounted on the space station.

Mason Peck, Associate Professor Mechanical and Aerospace Engineering at Cornell University wrote, "Receiving the full sequence of data per se is not of interest, but the mere reception of it (a single digital bit, for us), indicates successful transmission. If you would like to serve as one of the lucky few to try detecting this signal, please follow up with Zac Manchester (zrm3@cornell.edu). We definitely welcome the collaboration of HAM operators."

More information be found at these sources:
http://tinyurl.com/3fs5ks7 (spacemart.com)
http://www.spacecraftresearch.com/blog

[ANS thanks Zac Manchester and Mason Peck at Cornell University for the above information]

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SB SAT @ AMSAT $ANS-149.04
Awards Manager for AMSAT marks 10 Years

AMSAT News Service Bulletin 149.04
From AMSAT HQ SILVER SPRING, MD.
May 29, 2011

To All RADIO AMATEURS
BID: $ANS-149.04

It was May 12, 2001, the day that Mike Scarcella, WA5TWT, the previous AMSAT Awards Manager handed over all the files to me as the new Awards Manager. For 10 years I have performed this duty as fairly and equitably as I can. I computerized all the awards, entered some of the very early Communication Achievement Awards into the computer and helped create some new awards along the way.

Here's to another 10 years, enjoy.

Here is a list of awards issued in the last month or so.

The following have entered into the Satellite Communicators Club for making their first satellite QSO.

Brandon Rasmussen, K7BBR
Stephen Davis, KJ4FEL
Richard Ryan, KC2YDQ

The following have earned the AMSAT Communications Achievement Award.
Nikolai Ozerov, VE3NKL, #535
Richard Batchelor, KA5IQX, #536

The following have earned the AMSAT Sexagesimal Award.
Rodney Waln, KC0ZHF, #160

The following have earned the AMSAT Century Award.
Doug Papay, KD8CAO #41

The following have earned the South Africa Satellite Communications Achievement award Richard Batchelor, KA5IQX, #US166

The following have earned their Robert W. Barbee Jr., W4AMI Award.
Gerald Krebs, N0JE, #US72
John Papay, K8YSE, #US73
Ron Oldham, N8RO, #US63 endorsement for 2K, 3K, 4K
Bob Harrell, AJ5C, #US64 endorsement for 2K, 3K, 4K

The following have earned their Robert W. Barbee Jr., W4AMI 5000 Award.
Ron Oldham, N8RO, #26
Bob Herrell, AJ5C, #27

To see all the awards visit http://www.amsat.org or http://www.amsatnet.com

Bruce Paige, KK5DO
AMSAT Director Contests and Awards

[ANS thanks Bruce, KK5DO, for the above information]

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SB SAT @ AMSAT $ANS-149.05
Satellite Shorts From All Over

AMSAT News Service Bulletin 149.05
From AMSAT HQ SILVER SPRING, MD.
May 29, 2011
To All RADIO AMATEURS
BID: $ANS-149.05

+ AMSAT has received the sad news that Robin Harvey, G4BBR died on the morning of May 23, 2011 after a long illness. He was active in the early days of satellites in the 1970's. He was most active on Oscar 7. Robin was AMSAT Life Member number 445. Our condolences go out to his wife Shirley.

+ According to the 21 May 2011 A.R.I. DX Bulletin No. 1046 425 DX NEWS bulletin OY/PA0VHA, OY/PA2A and OY/PA2AM are active from Streymoy, Faroe Islands (EU-018) from 23 May to 2 June. In addition to HF, 6 meters, and 4 meters they plan satellite operation via AO-51 (if available). QSL via home calls.

+ A link on UniverseToday will bring you to an Infographic: How the New Multi-Purpose Crew Vehicle Stacks Up. Thanks to Space.com and the Tech Media Network for sharing this great graphic showing NASA's "new" MPCV and how it compares with other human spaceflight vehicles. http://tinyurl.com/3bngf99 (UniverseToday.com)

+ Back in time: Steve Haines VK3DBL has released a video showing a March 1997 contact he had with astronaut Andy Thomas KD5CHF/ VK5MIR who was on the MIR space station. See: http://tinyurl.com/3v7rbmh (Southgate)

+ The new WorldRadio OnLine magazine is now available at: http://www.worldradiomagazine.com/ ... In addition to several interesting features, the satellite column on page 38.

+ UniverseToday.com has a video, "The Sights and Sounds of Endeavour's Final Launch" made with HD cameras and multiple channel audio recording at: http://tinyurl.com/438s64y

+ OSCAR-11 UO-11 has switched back on. Its beacon is on 145.826 MHz FM. Bob, N4HY posted photos of UO-11 construction and testing: http://tinyurl.com/3d48j7x (n4hy.smugmug.com/)

+ AO-7 continues to provide good DX:
Luciano, PY5LF reports a 7843 km contact with Joe K3SZH, in Mode B, SSB.

Luis, LU6QI reports on his AO-7 DX on Mode B, CW:
Humberto XE1FZE: covering 7162 km
Jay AA4FL operating W4DFU covering 7200 km
Jim ND9M covering 7346 km

+ Pete, WB2OQQ posted a video showing his satellite operation from the special event station W2GSB/APM during the Great South Bay

Air Power Museum event celebrating Armed Forces Day:
http://www.youtube.com/watch?v=WyXHvYWaasg ... W2GSB/APM, a
collector QSL will be sent on SASE request to WB2OQQ's QRZ
address.

+ Congratulations to Cori, XYL of intrepid maritime-mobile satellite
operator Jim, ND9M/VQ9JC, upon passing her Technician exam at the
Dayton Hamvention!

+ Peter Guelzow, DB2OS, says a PDF presented at the AMSAT-DL Satellite
Symposium and General Meeting 2011 discussing the 'Status of AMSAT
P3-E and DLR-AMSAT P5-Moon/Mars' can be downloaded directly from
the AMSAT-DL server: http://tinyurl.com/44ter7y (AMSAT-DL)

[ANS thanks everyone for the above information]

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SB SAT @ AMSAT $ANS-149.06
ARISS Status - 23 May 2011

AMSAT News Service Bulletin 149.06
From AMSAT HQ SILVER SPRING, MD.
May 29, 2011
To All RADIO AMATEURS
BID: $ANS-149.06

1. Successful ARISS Contact with Debica, Poland

On Thursday, May 19, an ARISS contact was held between Primary and
Junior High Schools Complex in Podgrodziein, Debica, Poland and on-
orbit astronaut Ron Garan, KF5GPO. The contact complemented the
science curriculum covering physics and astronomy. Local amateur
radio operators, experienced in satellite contacts, worked with the
school's radio club to prepare for this event. Approximately eighty
students were in attendance and listened as Garan fielded 14 space-
related questions. News coverage was provided by radio, television
and newspapers.

2. ARISS International Team Meeting Held

The monthly ARISS partners meeting was held on Tuesday, May 17.
Topics of discussion included the ISS National Lab, the new proposal
process for U.S. schools and the Ericsson radio which was recently
installed in the Columbus Module. Minutes will be posted to the ARISS
Web site in the near future. http://www.rac.ca/ariss/arissmin.htm

3. ARRL QST Posts ARISS News

The American Radio Relay League (ARRL) included several ARISS-related
items in its June QST.

"In Brief" column told about Astronaut Chris Cassidy earning his Ama-
teur Radio license KF5KDR, and Astronaut Luca Parmitano earning his

Amateur Radio license KF5KDP. The "Happenings" column ran their photos and a lengthier story about them.

Then the two-page pictorial ran, titled "Houston, We Have Amateur Radio!" written by ARRL Chief Operating Officer Harold Kramer, WJ1B. There was a short summary about the ARISS education program, and then pictures of Kenneth Ransom with the radio in the simulator, the antenna on the ISS mockup, the Kenwood radio, W5RRR's satellite antenna on the tower, W5RRR's president (John Maca, AB5SS) with Harold, Mission Control, and Don Pettit, KD5MDT with Kenneth Ransom and Mark Severance.

4. ARRL Article on New Process for U.S. Schools

The American Radio Relay League (ARRL) ran a Web story on the new ARISS proposal process for U.S. schools. There will be two windows of opportunity each year for U.S. schools and organizations to submit proposals

for an ARISS contact. A window is currently open and proposals should be submitted by July 15, 2011 for a contact that will be scheduled during the January - July 2012 time frame. NASA sent out an EXPRESS message to 18,000 educators letting them know of this opportunity. The message may be found at the end of the article.
http://www.arrl.org/news/nasa-and-ariss-reach-out-to-educators

[ANS thanks Carol, KB3LKI, for the above information]

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SB SAT @ AMSAT $ANS-149.07
Nine New Cubesats

AMSAT News Service Bulletin 149.07
From AMSAT HQ SILVER SPRING, MD.
May 29, 2011
To All RADIO AMATEURS
BID: $ANS-149.07

Nine European Cubesats Heading to Space on Vega

Nine CubeSats built by European Universities are to be flown during the debut of Europe's new Vega launch vehicle scheduled for the final quarter of 2011.

Vega aims to make access to space easier, quicker and cheaper.

Development started in 1998 and it will be launched from the ESA Spaceport at Kourou in the Caribbean.

The nine CubeSats are: AtmoCube, e-st@r, Goliat, OUFTI 1, PW-Sat 1, ROBUSTA, UNICubeSAT, UWE 3, XaTcobeo

A video of the new VEGA launcher can be viewed here
http://esatv-movies.e-vision.nl/videos/mplo/
vega_tests_TV_05-10-11_wmplow.wmv

ESA CubeSat information
http://www.esa.int/esaMI/Education/SEM3N03MDAF_0.html

IARU Satellite Frequency Coordination pages
http://www.amsat.org.uk/iaru/

Southgate has this item posted at http://tinyurl.com/44smkw8.

[ANS thanks Southgate ARC News Site for the above information]

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SB SAT @ AMSAT $ANS-149.08
UK Coloqium

AMSAT News Service Bulletin 149.08
From AMSAT HQ SILVER SPRING, MD.
May 29, 2011
To All RADIO AMATEURS
BID: $ANS-149.08

FUNcube at AMSAT-UK Colloquium July 30-31

The 26th AMSAT-UK International Space Colloquium will be held on
the weekend of July 30-31 at the Holiday Inn Hotel, Guildford,
England, close to the University of Surrey. A special beginner's
session is planned for Friday afternoon July 29.

Among the presentations will be talks on the FUNcube satellite and
the FUNcube Dongle VHF-UHF Software Defined Radio.

In additional to the lecture stream there will be the GB4FUN Mobile
Communications Centre, AMSAT-UK shop, a Saturday night Gala dinner,
auction and raffle.

The event is open to all Radio Amateurs and SWL's. Either day passes
or full packages comprising overnight accommodation and meals are
available.

Further details are available on the AMSAT-UK website at:
http://www.uk.amsat.org/

[ANS thanks AMSAT-UK for the above information]

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SB SAT @ AMSAT $ANS-149.09
New ARISS School Procedure

AMSAT News Service Bulletin 149.09
From AMSAT HQ SILVER SPRING, MD.
May 29, 2011
To All RADIO AMATEURS
BID: $ANS-149.09

ARISS Announces New Process for US School Contact Proposals

ARISS and the NASA Johnson Space Center Education Office's Teaching
>From Space staff have announced new processes that US-based educators
will need to follow to propose a school contact with the International
Space Station crew.

ARRL ARISS Program Manager Rosalie White, K1STO says there will be
two windows of opportunity each year for educators to submit their
proposals for an ARISS contact. The first window opened on May 19
and will close on July 15, 2011. NASA's Teaching From Space Office
says the new proposal process applies only to US schools at this
time. Schools in other countries will continue to follow their ex-
isting process.

A proposal for an ARISS school contact consists of a comprehensive
education plan, of which the ARISS contact is one of many components:

+ The proposal should integrate NASA education and ARRL content
with surrounding education activities, and include creative ways
to maximize the reach of the ARISS contact and the experience for
students.

+ The educator must describe the instructional activities and lessons
to be engaged in with students as part of the learning and prepara-
tion for the ARISS contact.

+ The proposal should include study topics related to space technology,
space exploration or space research, as well as Amateur Radio, radio
science and wireless communications technology.

ARISS astronaut contacts under the new processes will begin in January
2012 and end in July 2012. A window of opportunity will open every six
months when another NASA news release goes to educators. The initial
NASA news release was sent on May 19 to 18,000 educators.

Full coverage of the ARISS program changes can be found on-line at:
http://www.arrl.org/news/nasa-and-ariss-reach-out-to-educators

NASA Teaching From Space web site can be viewed at:
http://www.nasa.gov/audience/foreducators/teachingfromspace/home/ariss.html

US schools wishing to propose an ARISS contact can get started at:
http://www.nasa.gov/audience/foreducators/teachingfromspace/students/ariss.h
tml

Non-US schools can find information regarding the proposal for an ARISS
contact at: http://www.rac.ca/ariss/oindex.htm

AMSAT Web site: http://www.amsat.org
ARISS Web site: http://www.ariss.org
ARISS Facebook Page: Amateur Radio on the ISS (ARISS)
ARISS Twitter site: @ARISS_status

Amateur Radio on the International Space Station (ARISS) is a volun-
teer program in partnership with AMSAT, ARRL, and NASA which inspires
students, worldwide, to pursue careers in science, technology, engin-

eering and math through amateur radio communications opportunities with the International Space Station on-orbit crew. Students learn about life on board the ISS and explore Earth from space through science and math activities. ARISS provides opportunities for the school community (students, teachers, families and local residents) to become more aware of the substantial benefits of human space flight and the exploration and discovery that occur on space flight journeys along with learning about technology and amateur radio.

[ANS thanks ARISS, the ARRL, and NASA for the above information]

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SB SAT @ AMSAT $ANS-149.10
AO-51 Partial Operation Restored

AMSAT News Service Bulletin 149.10
From AMSAT HQ SILVER SPRING, MD.
May 29, 2011
To All RADIO AMATEURS
BID: $ANS-149.10

AO-51 Partial Operation Restored

AMSAT-NA VP Operations, Drew Glasbrenner, KO4MA reports that partial operation has been restored to AO-51.

Because the Integrated Housekeeping (IHU) computer crashes during each eclipse turning AO-51 ON requires a manually sent series of commands from a control station to reload a small housekeeping program stored on the satellite from ROM, then turning the repeater on, setting the modulation level and turning the RF power down.

At present, this re-start sequence is being done on afternoon passes over North America when the satellite's solar panels are being illuminated by sunlight and it is in range of an available control station. AO-51 is being left enabled after the North American afternoon passes so stations in Asia may hear it active still on the descending morning passes there.

The crashes prevent Whole Orbit Data from being collected for analysis on the ground. Analysis of live telemetry indicates that one of the Ni-Cd battery cells has failed. Further study is still in progress.

Drew concluded, "Thanks for all the donations for Fox and ARISSat-1 over the last week! If you haven't yet donated, drop by http://www.amsat.org, or call Martha at 1-888-322-6728 today and help us get Fox in space."

Keep up with the latest AO-51 Control Team News on-line at:
http://www.amsat.org/amsat-new/echo/CTNews.php

[ANS thanks AMSAT-NA VP Operations Drew Glasbrenner, KO4MA for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the
President's Club. Members of the President's Club, as sustaining
donors to AMSAT Project Funds, will be eligible to receive
additional benefits. Application forms are available from the AMSAT Office.
Memeorial Day Tribute-Thanks to Veterans for what they have earned for us.

73,
This week's ANS Editor,
Dee Interdonato, NB2F
nb2f at amsat dot org

75. south actress hot photos and videos

Newsgroup: rec.radio.amateur.space
Date: 2011-05-30 08:57:12 UTC
From: devi <satyamsivam9030@gmail.com>
Message-ID: <bf60db23-ec0f-4a2c-9d13-c8b39fc32efd@o10g2000prn.googlegroups.com>
Source record: 301

FOR GOOD STUDY MATERIAL
http://studymaterialforu.blogspot.com

KATRINA KAIF IN BEAUTIFUL RED DRESS
http://southactresstou.blogspot.com/2011/05/katrina-kaif_22.html
GOOD LOOKING DEEPIKA PADUKONE
http://southactresstou.blogspot.com/2011/05/deepika-padukone_22.html
AISHWARYA RAI UNBELIVABLE PHOTO
http://southactresstou.blogspot.com/2011/05/aishwarya-rai.html
ANUSKHA IN A BEAUTIFUL SAREE
http://southactresstou.blogspot.com/2011/05/anushka-shetty.html
SEXY TAPSEE IN VEERA
http://southactresstou.blogspot.com/2011/05/tapsee.html
KAJAL IN BEAUTIFUL BLACK SAREE
http://southactresstou.blogspot.com/2011/05/kajal-agarwal.html
SNEHA SPICY PHOTOS
http://southactresstou.blogspot.com/2011/05/sneha.html
NAMITHA HOT PHOTS
http://southactresstou.blogspot.com/2011/05/namitha.html

76. WSR-150 AMSAT Weekly Satellite Report

Newsgroup: rec.radio.amateur.space
Date: 2011-05-30 15:59:02 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <001201cc1ee2$6cbe3a30$463aae90$@net>
Source record: 302
Cross-posted to: rec.radio.amateur.space,rec.radio.info

```
This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-150.S1
WSR 150 Part 1 05/30/2011

AMSAT NEWS SERVICE BULLETIN 150.S1
FROM AMSAT HQ SILVER SPRING, MD, May 30, 2011
TO ALL RADIO AMATEURS
BID: $WSR-150.S1

HO-68 HOPE-1 (CAS-1)(XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009 0231z
Launch site: Taiyuan Space Center, PRC

Status: By schedule

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
145.9250 - 145.9750 MHz SSB/CW
145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
435.7650 - 435.7150 MHz SSB/CW
435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://
[02092011]
=====
SO-67 SumbandilaSat
```

Catalog Number: 35870
Launch Date: September 17, 2009 1555z
Launch site: Baikonur, Kazakhstan

Status: By schedule

Callsign: ZS0SUM

Uplink: 145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/
[02092011]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=68
[02092011]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05, 2005 0444z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.9360 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[02092011]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004 0745z
Launch site: Baikonur, Kazakhstan

Status: Semi-operational

Current Mode(s):
Voice repeater: V/u
Uplink: 145.880 MHz FM
Downlink: 435.150 MHz FM

Telemetry: By Command ONLY
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.880 MHz FM
145.920 MHz FM
145.920 MHz FM - 67 Hz PL tone burst
1268.705 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.703 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[05162011]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002 1700z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4
Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the re-
peater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
the 10 minute timer.
[02092011]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993 0140z
Launch site: Kourou, French Guiana

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[02092011]
=====
AO-7 AMSAT OSCAR 7

Catalog number: 07530
Launch Date: November 15, 1974
Launch site: Vandenberg AFB, California, USA

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
145.972 MHz CW
435.100 MHz CW
2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02092011]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
Kourou, French Guiana
Uchinoura Space Center, Japan
Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - OFF
APRS - OFF
SSTV - OFF

Expedition 27 Crew:
Commander: Dmitry Kondratyev
Flight Engineer: Catherine Coleman KC5ZTH
Flight Engineer: Paolo Nespoli IZ0JPA
Flight Engineer: Ron Garan KF5GPO
Flight Engineer: Alexander Samokutyaev
Flight Engineer: Andrey Borisenko

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[05162011]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-150.S2
WSR 150 Part 2 05/30/2011

AMSAT NEWS SERVICE BULLETIN 150.S2
FROM AMSAT HQ SILVER SPRING, MD, May 30, 2011
TO ALL RADIO AMATEURS
BID: $WSR-150.S2

O/OREOS
Catalog Number: 37224
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.035 MHZ AX.25

Beacon:

Callsign:

URL: http://www.ooreos.org/
[02092011]
=====
Rax-1 Radio Aurora Explorer
Catalog Number: 37223
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.505 MHz 9k6 GMSK

Beacon:

Callsign: RAX-1

URL: http://rax.engin.umich.edu/
[02092011]
=====
FO-69 Fastrac-1 Sara Lily
Catalog Number: 37227
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On orbit

Uplink 1: 145.980 MHz 1k2 baud
Uplink 2: 145.825 MHz 1k2 baud
Downlink: 437.345 MHz 1k2 and 8k6 baud

Beacon: 437.435 MHz 1k2 AX.25

Callsign: Fast1

URL: http://fastrac.ae.utexas.edu/index.php
[02092011]
=====
FO-70 Fastrac-2 Emma
Catalog Number: 37380
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink 1: 435.025 MHz 1k2 baud
Uplink 2: 437.435 MHz 9k6 baud
Downlink: 145.825 MHz

Beacon: 145.825 MHz 1k2 AX.25

Callsign: Fast2

URL: http://fastrac.ae.utexas.edu/index.php
[02092011]
=====
StudSat
Catalog Number: 36796
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink: 437.505MHz, 9600bps FSK
Downlink: 437.505MHz, 9600bps FSK
Beacon : 437.505MHz, 20bps ASK
[02092011]
=====
TIsat-1
Catalog Number: 36799
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On orbit

Callsign: HB9DE

Uplink: 145.980MHz FM, AFSK
Downlink: 437.305MHz FM, AFSK
Beacon: 437.305MHz CW
[02092011]
=====
HO-68 HOPE-1 (CAS-1)(XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009 0231z
Launch site: Taiyuan Space Center, PRC

Status: By schedule

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
145.9250 - 145.9750 MHz SSB/CW
145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
435.7650 - 435.7150 MHz SSB/CW
435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://
[02092011]
=====
SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w): 437.5050MHz FSK 1k2bps
[02092011]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
437.3850 MHz FSK 9k6bps
[02092011]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps
[02092011]
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
Beacon(500mw): 436.000MHz GMSK 9k6bps
[02092011]
=====
CP-6

Catalog Number: 35003
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: Operational

Downlink: 437.365 MHz 1k2 AFSK
[02092011]
=====
HAWKSAT 1
Catalog number: 35004
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: operational

Downlink: 437.345 MHz ?
[02092011]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: Operational

Downlink: 437.465 MHz 1k2 AFSK
[02092011]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009 0115z
Launch Site: Satish Dhawan Space Centre, India

Status: ?

Downlink: 435.000 MHz
Uplink: 145.800 MHz

Telemetry: 137.400 MHz
[02092011]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon: 437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=101
[02092011]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: In Orbit

Downlink: 437.375 MHZ FSK9k6/CW
Beacon: 437.375 MHz FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[02092011]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
437.465 MHz FM/CW
Beacons: 437.305 MHz FM/CW
437.275 MHz FM/CW

Callsigns: JR5YBN
JR5YBO

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[02092011]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Downlink: 437.455 MHz AFSK/CW
Beacon: 437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[20092011]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon: 437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[02092011]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008 1520z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Curent Modes: Telemetry
Audio
Images

Downlinks: 435.315 MHz
435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02092011]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web
page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=46
[02092011]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=60
[02092011]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Digipeater

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL
=/satellites/status.php
[02092011]
=====
Compass-1

Catalog number: 32787
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Current Mode: 4k8 MSK packet

Uplink: 145.980 MHz FM
Downlink: 437.275 Mhz CW
437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[02092011]
=====
CO-66 Seeds II
Catalog number:
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web
page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL
=/satellites/status.php
[02092011]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=72
[02092011]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25
[02092011]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005 0652z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm
[02092011]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: ?????

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[02092011]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004 0745z
Launch site: Baikonur, Kazakhstan

Status: Semi-operational

Current Mode(s):
Voice repeater: V/u
Uplink: 145.880 MHz FM
Downlink: 435.150 MHz FM

Telemetry:
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.880 MHz FM
145.920 MHz FM
145.920 MHz FM - 67 Hz PL tone burst
1268.700 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.708 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=19
[05162011]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[02252011]
=====
CO-55 CUTE-1
Catalog Number: 27844
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Current Mode: CW downlink worldwide
AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php
[02092011]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001 0240z
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[02092011]
=====
RS-22 RADIO SPORT 22 (MOZHAYETS 4)
Catalog number: 27939
Launch Date: September 27, 2003 0612z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02092011]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990
Launch site: Kourou, French Guiana

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
145.860 MHz 1200-baud Manchester FSK
145.880 MHz 1200-baud Manchester FSK
145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[02092011]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984
Launch site: Vandenburg AFB, California, USA

Status: Operational

Current Mode: /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz

Mode-S Beacon: 2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[02092011]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
Kourou, French Guiana
Uchinoura Space Center, Japan
Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - OFF
APRS - OFF
SSTV - OFF

Expedition 27 Crew:
Commander: Dmitry Kondratyev
Flight Engineer: Catherine Coleman KC5ZTH
Flight Engineer: Paolo Nespoli IZ0JPA
Flight Engineer: Ron Garan KF5GPO
Flight Engineer: Alexander Samokutyaev
Flight Engineer: Andrey Borisenko

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[05162011]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-150.S3
WSR 150 Part 3 05/30/2011

AMSAT NEWS SERVICE BULLETIN 150.S3
FROM AMSAT HQ SILVER SPRING, MD, May 30, 2011
TO ALL RADIO AMATEURS
BID: $WSR-150.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NANOSAIL-D
Catalog Number:
Ejection Date: January 17, 2011

Status: On orbit

Downlink: 437.270 MHz AX.25

URL: http://nanosaild.engr.scu.edu/dashboard.htm
[01272011]
=====
CP4
Catalog Number: 31132
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=79
[09062010]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25
[09062010]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM
[09062010]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.250

Official Website: http://www.ncube.no
[09062010]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink 2401.835 MHz 38k4 packet

Official webpage: http://sseti.gte.tuwien.ac.at/WSW4/
Latest news: http://sseti.gte.tuwien.ac.at/WSW4/MOPWS/news.php
[09062010]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK
[09062010]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====

MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks: 145.850 MHz
145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545

Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks

V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON General Beacon(GB) Middle Beacon(MB) Engineering Beacon(EB)
2 m none 145.898 MHz none
70cm 435.438 MHz 435.588 MHz 435.838 MHz
13cm(1) 2400.188 MHz 2400.338 MHz 2400.588 MHz
13cm(2) 2401.173 MHz 2401.323 MHz 2401.573 MHz
3cm 10450.975 MHz 10451.125 MHz 10451.375 MHz
1.5cm 24047.885 MHz 24048.035 MHz 24048.285 MHz
[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK

[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
145.890 FM
145.930 FM
1269.700 FM
1269.800 FM
1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[07172010]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink: 435.1380 MHz AFSK 1200 BPS
Downlink: 435.2060 MHz AFSK 1200 BPS
Uplink: 145.8150 MHz AFSK 1200 BPS
Uplink: 145.8350 MHz AFSK 1200 BPS
Uplink: 145.8550 MHz AFSK 1200 BPS
Uplink: 145.8750 MHz AFSK 1200 BPS
[06042009]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Non-operational
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
145.870 MHz FM
145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[11062010]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks: 145.875 MHz FM 1200-baud
145.900 MHz FM 1200-baud
145.925 MHz FM 1200-baud
145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink: 435.0625 MHz FM 1k2bps AFSK
435.1125 MHz FM 1k2bps AFSK
435.1375 MHz FM 1k2bps AFSK

Downlink: 145.9750 MHz FM 1k2bps AFSK
2446.5025 MHz FM 1k2bps AFSK

Beacon: 2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink: 435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons: 435.795 MHz CW
435.910 MHz AX25

Voice Transponder:
Uplink: 145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks: 145.850 MHz
145.870 MHz
145.890 MHz
145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode: V/u

Uplink: 145.900 MHz FM 1200-baud Manchester FSK (reserved)
145.920 MHz FM VOICE
145.940 MHz FM 1200-baud Manchester FSK (reserved)
145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink: 437.026 MHz USB VOICE
(1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
PSK 437.026 MHz LHCP

V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink: 145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink: 145.8500 MHz MFSK 1200 BPS
Uplink: 145.8700 MHz MFSK 1200 BPS
Uplink: 145.8900 MHz MFSK 1200 BPS
Uplink: 145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.8500 - 145.9000 MHz SSB/CW
Downlink 29.4000 - 29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink: 29.4500 - 29.5500 MHz SSB/CW
Beacons: 29.450 MHz
435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
29.4500 MHz CW
[01152007]
=====
OSCAR III

Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink: 145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB

Beacon 1: 29.352 MHz (intermittent)
Beacon 2: 29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-150.S4
WSR 150 Part 4 05/30/2011

AMSAT NEWS SERVICE BULLETIN 150.S4
FROM AMSAT HQ SILVER SPRING, MD, May 30, 2011
TO ALL RADIO AMATEURS
BID: $WSR-150.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Re-entered
Re-entered: October 25, 2009

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsat.org.uk/iaru/finished_detail.asp?serial=56
[09062010]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 437.325 MHz 9k6 GMSK
437.325 MHz CW 20wpm
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 436.250 MHz 9k6 FHSS
[11112009]
=====
Pollux
Catalog Number: 35693
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25
[09062010]
=====
Castor (ANDE-2)
Catalog Number: 35694
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25
[09062010]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Re-Entered
Re-entered date: August 8, 2010

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[08082010]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA

850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at}
amsat.org
NNNN
/EX

77. Weekly Highlights of Solar and Geomagnetic Activity, 23 - 29 May 2011

Newsgroup: rec.radio.amateur.space
Date: 2011-06-01 01:30:09 UTC
From: SWPC.Webmaster@noaa.gov
Message-ID: <20110601013001.6F31733C5F@panix2.panix.com>
Source record: 303
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.info

```
:Product: Weekly Highlights and Forecasts
:Issued: 2011 May 31 2115 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
# Weekly Highlights and Forecasts
#
Highlights of Solar and Geomagnetic Activity
23 - 29 May 2011

Solar activity was at very low to moderate levels during the period.
The period began with very low activity, with a few isolated B-class
flares observed. A long-duration B2 flare was observed at 24/2237
UTC from Region 1220 (N13, L=248, class/area Bxo/050 on 23 May).
Activity increased to low levels on 25 May, with two C-class flares
from Region 1223 (S16, L=115, class/area Dso/050 on 27 May). The
first was a C1 flare at 25/2103 UTC, followed by a C1/Sf at 25/2158
UTC. A nine-degree filament eruption was observed between
25/0801-1256 UTC. Activity decreased to very low on 26 May, with
three B-class flares, included a B4/Sf at 26/0110 UTC. Activity
increased to low levels on 27 May, with five C-class flares,
including a C5 flare at 27/1643 UTC from Region 1226 (S21, L=036,
class/area Eki/360 on 29 May). Activity increased to moderate levels
during 28-29 May. A long-duration M1 /Sf was observed at 28/2150 UTC
from Region 1226, as well as an M1/1F observed at 29/1033 UTC. Type
II radio emission (554 km/s shock velocity) was associated with this
event.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at
normal to moderate levels during 23 - 28 May. High levels were
reached on 29 May.

Geomagnetic field activity was predominantly quiet during 23 - 26
May. Activity increased to quiet to unsettled levels, with active
periods at high latitudes, on 27 May. Activity increased to quiet to
severe levels during 28-29 May. A co-rotating interaction region, in
advance of a coronal hole high-speed stream (CH HSS), occurred
during 27- 29 May. A CME was was observed to interact with the field
during 28-29 May.

Forecast of Solar and Geomagnetic Activity
01 June - 27 June 2011
```

Solar activity is expected to be low with a chance for M-class flares through 9 June. Activity is expected to decrease to very low to low levels during 10 - 14 June. Activity is expected to increase to low with a chance for M-class flares.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at high levels through 5 June. Normal levels are expected during 9 - 27 June.

Geomagnetic field activity is expected to be at quiet to unsettled levels, with active levels at high latitudes during 1 - 5 June, due to an expected CME and a recurrent CH HSS. Activity is expected to decrease to predominantly quiet levels during 6 - 10 June. Activity is expected to increase to quiet to unsettled levels, with isolated active levels at high latitudes during 11-13 June, due to an expected CH HSS. Quiet to unsettled levels are expected during 14-22 June. Quiet to unsettled levels, with isolated active levels are expected during 23 - 25 June due to a recurrent CH HSS. Actitvity is expected to decrease to mostly quiet during 26 - 27 June.

78. Crossposting Permitted to rec.radio.amateur.moderated

Newsgroup: rec.radio.amateur.space
Date: 2011-06-01 06:00:03 UTC
From: rram@panix.com
Message-ID: <radio/ham-radio/moderated/crossposting-1-1306908001@panix.com>
Source record: 304
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.info

```
Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/moderated/crossposting
Revision: 1.1 2009/04/12 19:42:04
Posting-Frequency: posted monthly
URL: http://www.panix.com/~rram/usenet/rram/index.html

Changes followed by "|".

After a 30-day public discussion and feedback period to gauge reader
opinions in March of 2009:

http://groups.google.com/group/rec.radio.amateur.moderated/browse_thread/thread/d7d337db35
f23326

the rec.radio.amateur.moderated Moderation Team has decided to consider
amending its charter, and permit limited simultaneous crossposting to
rec.radio.amateur.moderated and one other unmoderated
amateur-radio-related discussion newsgroup. We are currently trying
this on a temporary basis (90 days, through early July 2009), and adopt
it permanently if successful.

Approved rec.radio.amateur.* newsgroups are those that are currently
listed in the latest version of the "List of Big Eight Newsgroups" which
is crossposted monthly to news.announce.newgroups, news.groups, and
news.lists.misc.

Approved alt.radio.amateur.* and alt.ham-radio.* newsgroups are those
that have been created consistent with the suggestions in "So You Want
to Create an Alt Newsgroup" at:

http://www.faqs.org/faqs/alt-creation-guide/

Approved regional hierarchy newsgroups are those that contain either
"radio.amateur" or "ham-radio" in their names, including
uk.radio.amateur and aus.radio.amateur.misc.

We will make every reasonable effort to keep our list of approved
newsgroups up-to-date. In case we have overlooked any, and a submission
is rejected in error as a result, the rejected submitter can E-mail us
at our administrative contact address (in the signature at the bottom of
this article, and the default Reply-To for the rejection message)
requesting that it be added, and that the article be approved. We may
still choose to reject articles crossposted to any alt.* newsgroup with
an inappropriate name, including obscene language, embedded
name-calling, or encouragement of unlawful conduct.
```

Please direct any comments, questions, or criticisms to
rec-radio-amateur-moderated-request@panix.com.

79. ANS-156 AMSAT News Service Weekly Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2011-06-05 01:28:37 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <001f01cc231f$e03ffcf0$a0bff6d0$@net>
Source record: 305
Cross-posted to: rec.radio.amateur.space,rec.radio.info

AMSAT NEWS SERVICE
ANS-156

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* Eclipses Continue to Affect AO-51 Operation
* Reminder: The DARA Matching Gift Challenge
* AMSAT-NA Board of Directors Nominations Due by June 15th
* New Satellite Award: 5 in EM55
* AMSAT-DL Break FUNcube Dongle Distance Record
* Satellite Shorts From All Over
* 2011 AMSAT Field Day Competition
* Open Source Hardware List From Dayton TAPR Forum
* US Army Supports Student Launch Program

SB SAT @ AMSAT $ANS-156.01
Eclipses Continue to Affect AO-51 Operation

AMSAT News Service Bulletin 156.01
>From AMSAT HQ SILVER SPRING, MD.
June 5, 2011
To All RADIO AMATEURS
BID: $ANS-156.01

Last week's ANS bulletins reported that the AO-51 Command Team had successfully restored the satellite to partial operations. AO-51 at that time required a reload/reboot sequence every time it emerged from eclipse due to the Integrated Housekeeping (IHU) computer crashing from low battery voltage.

This week AMSAT VP-Operations, Drew Glasbrenner, KO4MA said, "AO-51's computer has been running for over 5 hours now. We have left the satellite in repeater mode 145.88/435.15 for the time being, at over 2 watts. We are very surprised by this development to say the least. Without Whole Orbit Data we are flying a bit blind, so would really like to know what the satellite is doing in eclipse. Please send your reports to me or to the amsat-bb. Southern hemisphere observations

are most very welcome."

+ Robert, NH7WN reported from Honolulu: "AO51 was alive and well as she came out of eclipse on June 2. I was able to hear myself perfectly on the downlink (145.880 up and 435.150 down)."

+ Brett reported: "Heard on AO-51 today pass over Australia/New Zealand 145.880/435.150 Strong signals. Copied VK1AMG, ZL2BX, VK4VDX."

+ Alan, ZL2BX reported: "AO-51 solid signals in ZL. AOS (0459 UT) about five minutes after it came out of eclipse. Later on June 3, I can finally confirm that AO-51 is loud and clear over ZL in full eclipse. with solid signals from the transponder."

+ Dave, KB5WIA reported from California, "AO-51 was in great shape as it passed south above the Pacific Ocean on June 3. I had a nice S9+ full quieting downlink for the entire pass."

The Command Team has analyzed AO-51 live telemetry when the satellite is in range of a ground station because Whole Orbit Data is lost when the IHU Computer crashes. Drew, KO4MA summarized, "Cell 3 is reporting 0.0 volts, so it's clear it has shorted completely."

Donations for Fox and ARISSat-1 are being collected. If you haven't yet donated, please drop by http://www.amsat.org, or call Martha at the AMSAT Office at 1-888-322-6728 today and help us get Fox in space.

Keep up with the latest AO-51 Control Team News on-line at: http://www.amsat.org/amsat-new/echo/CTNews.php

[ANS thanks AMSAT-NA VP Operations Drew Glasbrenner, KO4MA for the above information]

/EX

SB SAT @ AMSAT $ANS-156.02
Reminder: The DARA Matching Gift Challenge

AMSAT News Service Bulletin 156.02
>From AMSAT HQ SILVER SPRING, MD.
June 5, 2011
To All RADIO AMATEURS
BID: $ANS-156.02

The Dayton Amateur Radio Association (DARA) has announced a fund raising challenge for AMSAT whereby they will match on a 1:3 basis up to $5,000.00 for donations made in 2011. That is, for every $3.00 that AMSAT raises, DARA will provide $1.00 up to a maximum of $5,000 donated by DARA.

AMSAT kicked off the fundraising campaign at the Hamvention, where donations began count against this goal. Please consider making a donation to AMSAT at Hamvention or anytime this Spring as we strive to meet this goal.

We appreciate DARA's support for AMSAT and see this as an opportunity for donors to increase the impact of their donations by taking advantage of this matching program.

[ANS thanks AMSAT Headquarters for the above information]

/EX

SB SAT @ AMSAT $ANS-156.03
AMSAT-NA Board of Directors Nominations Due by June 15th

AMSAT News Service Bulletin 156.03
>From AMSAT HQ SILVER SPRING, MD.
June 5, 2011
To All RADIO AMATEURS
BID: $ANS-156.03

It is time to submit nominations for the upcoming open seats on the AMSAT-NA Board of Directors. The deadline is June 15th. A valid nomination requires either one Member Society, or five current individual members in good standing, to nominate an AMSAT member for the position.

Four director's terms expire this year:

Barry Baines, WD4ASW
Alan Biddle, WA4SCA
Drew Glasbrenner, KO4MA
Tony Monteiro, AA2TX

The four candidates receiving the highest number of votes will be seated as full Board members for two year terms. The two candidates receiving the next highest number of votes will be seated as alternate Board members for one year terms.

Beginning this year, in addition to traditional submissions of written nominations which remains unchanged and is the preferred method, initial nominations may be made by electronic means.=A0 These include e-mail, FAX, or electronic image of a petition. Electronic petitions should be sent to MARTHA@AMSAT.ORG or faxed to 301-608-3410. Written nominations, consisting of names, calls, and individual signatures, should be mailed to:

AMSAT-NA
850 Sligo Ave #600
Silver Spring, MD, 20910

No matter what method is used, petitions MUST arrive no later than June 15th at the AMSAT-NA office. If the nomination is a traditional written nomination, no other action is required. If it is other than this, i.e. electronic, a verifying traditional written petition MUST be received at the AMSAT-NA office at the above address within 7 days following the close of nominations on June 15th. ELECTRONIC SUBMISSIONS WITHOUT THIS SECOND, WRITTEN VERIFICATION ARE NOT VALID UNDER THE EXISTING AMSAT-NA BYLAWS.

Alan Biddle
WA4SCA
AMSAT Corporate Secretary

[ANS thanks Alan, WA4SCA, for the above information]

/EX

SB SAT @ AMSAT $ANS-156.04
New Satellite Award: 5 in EM55

AMSAT News Service Bulletin 156.04
>From AMSAT HQ SILVER SPRING, MD.
June 5, 2011
To All RADIO AMATEURS
BID: $ANS-156.04

Damon, WA4HFN announced this week, "In an effort to help increase interest in satellites, we have created a new award for working five (5) different hams in the EM55 grid."

You do not have to be in your home grid to count the stations worked. There are several satellite ready hams in EM55. Here is the current list that we know of: WA4NVM, WA4HFN, WB4LHD, WA4OVO, KI4OTG, KD4NOQ, KJ4BIX, AND AJ4KF.

Send your log to WA4NVM or WA4HFN for checking, along with your current mailing address. The award is free and should any donations be sent, they will be forwarded to AMSAT along with your call and name.

This award will be effective 1 June 2011, therefore, all contacts must be on or after this date.

[ANS thanks Damon, WA4HFN for the above information]

/EX

SB SAT @ AMSAT $ANS-156.05
AMSAT-DL Break FUNcube Dongle Distance Record

AMSAT News Service Bulletin 156.05
>From AMSAT HQ SILVER SPRING, MD.
June 5, 2011
To All RADIO AMATEURS
BID: $ANS-156.05

A story first reported on the Southgate ARC news web site reported members of AMSAT-DL have received the Stereo B spacecraft at a distance of 219 million kilometers using an AMSAT-UK FUNcube Dongle Software Defined Radio as the I.F. in combination with a downconverter.

Stereo B transmits in the X band around 8 GHz so could not be received by the FUNcube Dongle directly since that covers 64-1700 MHz. A downconverter was installed at the dish feed and the 1280 MHz output

was fed into the FUNcube Dongle SDR.

The frequency of Stereo B varies due to Doppler shift (of the rotating
Earth) and was calculated by the tracking software.

Watch Mario Lorenz DL5MLO explain how the record was broken Receiving
Stereo B with a FUNcube dongle and the Bochum 20m dish:
http://tinyurl.com/6eukmjv (Southgate)

ANS thanks Southgate ARC news site for the above information]

/EX

SB SAT @ AMSAT $ANS-156.06
Satellite Shorts From All Over

AMSAT News Service Bulletin 156.06
>From AMSAT HQ SILVER SPRING, MD.
June 5, 2011
To All RADIO AMATEURS
BID: $ANS-156.06

+ EE Times published an article, "High-performance FPGAs take
flight in microsatellites" featuring the U.K. Space Agency's
UKube1 mission. This satellite will also fly a transponder
based on AMSAT-UK's FUNcube design. The EE Times article is
available on-line at: http://tinyurl.com/6he8n82
A downloadable PDF file of the article can be found at:
http://www.xilinx.com/publications/archives/xcell/Xcell75.pdf

+ Free Book Downloads! National Academies Press offers more than
4,000 titles as free PDF downloads. Begin on their download
site at: http://www.nap.edu/ (Tammy Plotner on June 2, 2011
at UniverseToday.com).

+ SO-67 has been reported to be active this past week. Monitor
the satellite's schedule usually posted at:
http://www.amsatsa.org.za/

+ The next Hudson Valley Satcom Nets are scheduled for June 9 and
June 23, at 8PM EDT (UTC-4) on the 146.970 MHz repeater, (Pl 100),
and also on Echolink node N2EYH-L. More info: http://www.hvsatcom.org
(Stu, WA2BSS)

+ Angel Santana, WP3GW posted a video on YouTube about his live con-
tact with the ISS this past week:
http://www.youtube.com/watch?v=rdzRWEzKH_M

+ A video based on images captured by the NASA with the Cassini Imaging
Science System team has been posted by Chris Abbas of Digital Kitchen:
http://vimeo.com/24410924 The UniverseToday story can be found at:
http://tinyurl.com/6xyp4ph (UniverseToday.com)

+ NASA reveals the excitement of planetary exploration in over 90 images that can be viewed on their science outreach program called From Earth to the Solar System (FETTSS) web page: http://www.fromearthtotheuniverse.org/index.php

+ This high definition short is a fascinating document. Narrated by NASA's Dr. Justin Wilkinson, it shows a tour of planet Earth as seen by astronauts, explaining what are the places that they first focus on while in orbit: http://www.youtube.com/watch?v=rj18UQjPpGA (Clint, K6LCS)

+ Check your ISS Keps! According to Roscosmos, the ISS boosted its orbit by 3.74 km Friday. This will result in a "slippage" of predicted times of approximately 70 seconds per day until the Keps catch up. The AMSAT NASA.ALL Keps will probably not reflect this until next week, so be certain to update from Celstrak or Space Track.

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-156.07
2011 AMSAT Field Day Competition

AMSAT News Service Bulletin 156.07
>From AMSAT HQ SILVER SPRING, MD.
June 5, 2011
To All RADIO AMATEURS
BID: $ANS-156.07

AMSAT Director of Awards, Bruce Paige, KK5DO says, "It's that time of year again: Summer and Field Day!"

Each year the American Radio Relay League (ARRL) sponsors Field Day as an emergency preparedness exercise. The event takes place during a 24-hour period on the fourth weekend of June. For 2011 the event takes place during a 27-hour period from 1800 UTC on Saturday June 25, 2011 through 2100 UTC on Sunday June 26, 2011. Those who set up prior to 1800 UTC on June 25 can operate only 24 hours.

The Radio Amateur Satellite Corporation (AMSAT) promotes its own version of Field Day for operation via the amateur satellites, held concurrently with the ARRL event.

Bruce advises, "If you are considering ONLY the FM voice satellites like AMRAD-OSCAR-27, SaudiSat-Oscar-50, or AMSAT-OSCAR-51 for your AMSAT Field Day focus. Don't, unless you are simply hoping to make one contact for the ARRL rules bonus points."

The congestion on FM LEO satellites was so intense in prior years that we must continue to limit their use to one-QSO-per-FM-satel-lite. This includes the International Space Station. You will be allowed one QSO if the ISS is operating Voice. You will also be allowed one digital QSO with the ISS or any other digital, non-

store-and-forward, packet satellite (if operational).

Please refer to these links for the full document of the AMSAT Field Day rules:
http://www.amsat.org/ (link on AMSAT.org front page to PDF file)
And, an alternative site is:
http://www.amsatnet.com/2011fd.doc (MS-Word Doc File)
http://www.amsatnet.com/2011fd.pdf (PDF File)

These documents also cover the message exchange format, scoring requirements, reporting requirements, station classes, etc.

[ANS thanks AMSAT Director of Awards, Bruce Paige, KK5DO for the above information]

/EX

SB SAT @ AMSAT $ANS-156.08
Open Source Hardware List From Dayton TAPR Forum

AMSAT News Service Bulletin 156.08
>From AMSAT HQ SILVER SPRING, MD.
June 5, 2011
To All RADIO AMATEURS
BID: $ANS-156.08

A discussion on the HPSDR-list contained a list from Open Source evangelist Bruce Peren's talk at the TAPR Forum in Dayton which provides supplier sources of relatively inexpensive Open Source" hardware.

Some of the specific hardware projects listed include:

+ OMAP L138. (TI chip with ARM and a DSP both on board)
http://tinyurl.com/5wb8ocz

+ Papilo FPGA
http://tinyurl.com/3xnfne8
Also there is a 32-channel logic analyzer for $50 there.

+ Arduino http://www.arduino.cc/

+ $15 CPLD (you can build things from 74xx series gate equivalent logic): http://tinyurl.com/6h28olw

+ Bus Pirate
http://tinyurl.com/47as6x9

Subscription information for the HPSDR list can be found at:
http://lists.openhpsdr.org/listinfo.cgi/hpsdr-openhpsdr.org

[ANS thanks George K9TRV and Bruce Perens for the above information]

/EX

SB SAT @ AMSAT $ANS-156.09
US Army Supports Student Launch Program

AMSAT News Service Bulletin 156.09
>From AMSAT HQ SILVER SPRING, MD.
June 5, 2011
To All RADIO AMATEURS
BID: $ANS-156.09

(Editor Note: This item originated on the Space-Travel.com web
at http://tinyurl.com/6zsu4ea

White Sands Missile Range NM (SPX) Jun 03, 2011. A scientific rocket screamed skyward at Spaceport America May 20, 2011, as students from all over New Mexico, as well as Texas and Arizona came to see their scientific payloads fly into space during a scientific and educational mission supported by White Sands Missile Range.

The rocket carried 27 experiments from elementary, middle schools, high schools and universities into space before returning to earth, and landing at White Sands Missile Range, or WSMR. Under the New Mexico Space Grant Student Launch Program, students were able to assemble their own scientific payloads to be launched over 65 miles above the earth.

The student payloads, divided into seven different canisters within the rocket were a varied as the students who built them. Crammed into the canisters were cameras, radiation monitoring sensors, and other measurement devices, along with some more advanced systems.

"We had things from roasting green chilies to marshmallows to using a piezo electric board, tesla coils, and a lot of temperature monitors and Geiger counters, a bunch of variety, and a lot of magnetic experiments also," said Bruce Lewis with the space grant office and spaceport office.

The rocket launch represented more than just an educational opportunity for the students, but a cooperative effort between different organizations and companies. Even though the rockets flight began at Spaceport America, a state-run spaceport, it ended its flight on White Sands Missile Range and used range airspace.

"This is White Sands airspace that we're flying in, so White Sand controls that airspace for us. We have a great relationship with White Sands and we had a lot of support from (WSMRs) team," said Pat Hynes, director of the Space Grant Consortium.

The recovery of the rocket, and it's return to the students was conducted by White Sands Missile Range's Army Air. While the rocket was awaiting recovery White Sands Missile Range Chief of Staff Dan Hicks spoke with the students about the future of high technology careers and the kind of opportunities in those fields offered by WSMR and the Army.

"The majority of the workforce consists of engineers and mathematicians and other scientific fields. We've got about 4,000 people on the test center and garrison side that have that type of background. So in order to be specific to what it takes to get a job out at White Sands one of the key things would be to continue your education into college and get a degree," Hicks said.

Hick Also answered questions from the students about spaceflight, how the range operates and the kind of radar systems used to track rockets like the one used in the experiment.

Data collected by these various devices had a variety of applications, with some being educational in nature, giving the students a glimpse of what it means to send something into space, and other experiments having more direct applications to the future of space flight.

"Some of it is great data; some of it is fun data. So you're got both the fun stuff and some things that are collecting real empirical data that NASA may be able to use in the future," Lewis said.

One experiment bridged the gap between the two. An experiment conducted by Aztec High School harvested the physical motion of the rocket in flight and converted it into electricity which was then used to power a small electric oven and roast a green chili. While roasting green chilies isn't critical to the future of space flight, the electricity could have other purposes.

"What we wanted to see is if you could power something in the rocket just using piezo electrics, just using the own forces of the rocket to generate it's own electricity while flying up into space," said Braden Goimarac, from Aztec High School's "Black Ops" science team.

[ANS thanks Space-Travel.com for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office. And with that keep in mind the ham who asked his dog if the name Pavlov rang a bell.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

80. Weekly Highlights of Solar and Geomagnetic Activity, 30 May - 05 June 2011

Newsgroup: rec.radio.amateur.space
Date: 2011-06-07 21:30:09 UTC
From: SWPC.Webmaster@noaa.gov
Message-ID: <20110607213001.D3B3C33C5F@panix2.panix.com>
Source record: 306
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.info

```
:Product: Weekly Highlights and Forecasts
:Issued: 2011 Jun 07 1756 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
# Weekly Highlights and Forecasts
#
Highlights of Solar and Geomagnetic Activity
30 May - 05 June 2011

Solar activity was at low levels during 30 May - 04 June with
C-class flares from Regions 1226 (S21, L = 037, class/area Eki/360
on 29 May) and 1227 (S19, L = 022, class/area Dsi/190 on 31 May). A
C3/2n flare at 02/0746 UTC from Region 1227 was associated with an
Earth-directed partial-halo CME.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at
high levels from 30 May - 04 June and returned to normal levels on
05 June.

Geomagnetic field activity ranged from quiet to major storm levels
during the period. Activity was at quiet to active levels during 30
May - 01 June as CH HSS effects persisted. A CME passage occurred on
01 June which caused a brief period of active levels. Activity
decreased to quiet to unsettled levels on 02 June as CH HSS effects
subsided. Quiet levels occurred during 03 - 04 June. A geomagnetic
sudden impulse (SI) occurred at 04/2045 UTC (54 nT, Boulder USGS
magnetometer) associated with the CME observed on 02 June and was
followed by active to minor storm conditions on 05 June with major
storm conditions observed at high latitudes.

Forecast of Solar and Geomagnetic Activity
08 June - 04 July 2011

Solar activity is expected to be at low levels throughout the period
with a chance for an isolated M-class flare from Region 1226 until
it departs the west limb on 10 June.

The greater than 10 MeV and 100 MeV proton flux at geosynchronous
orbit are expected to be above alert threshold levels through 11
June due to a fast moving halo coronal mass ejection (CME) observed
early on 07 June. A return to background levels is expected on 12
```

June and is expected to stay below threshold for the remainder of the period.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at high levels from 08 - 15 June due to the effects from both the 02 June CME and the 07 June CME. Normal to moderate levels are expected to return until 27 June following a recurrent coronal hole high speed stream.

Geomagnetic field activity is expected to be at quiet to unsettled levels during 08 June as coronal hole high speed stream (CH HSS) effects begin to wane. Active to major storm conditions are expected on 09 June due to the effects of the halo CME observed on 07 June. Activity is expected to decrease to unsettled to active levels during 10 - 12 June due to residual effects of the CME and another CH HSS. Activity is expected to decrease to mostly quiet levels on 13 June as CH HSS effects subside. Quiet levels are expected during 14 - 22 June. Quiet to unsettled levels are expected from 23 - 26 June due to another recurrent CH HSS. A return to quiet conditions is expected on 27 June as the effects of the CH HSS subside.

81. Radio Meteor Obs. Bull. June 2011 eta Aquarids

Newsgroup: rec.radio.amateur.space
Date: 2011-06-08 18:50:00 UTC
From: Chris Steyaert <observations@rmob.org>
Message-ID: <tugvu6pqktlgfkrpr3tio9j4j07r1rll01@4ax.com>
Source record: 307
Cross-posted to: rec.radio.amateur.space,sci.astro.amateur

Radio Meteor Observation Bulletin No. 214 of May 2011 (87 K) is available now as

http://www.rmob.org/rmobtext/rmob1105.txt

More information and the visual presentation of the hourly forward scatter
counts can be found on

http://www.rmob.org

Chris

82. ANS-163 AMSAT News Service Weekly Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2011-06-12 13:15:40 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <000f01cc2902$cf46aa50$6dd3fef0$@net>
Source record: 308
Cross-posted to: rec.radio.amateur.space,rec.radio.info

AMSAT NEWS SERVICE
ANS-163

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* ARISSat-1 Reception Challenge
* Call for Papers
* AMSAT-NA Board of Directors Nominations Due by June 15th
* New Items in AMSAT Store
* OM3BD Looking for North America Satellite Contacts
* Satellite Shorts From All Over
* 2011 AMSAT Field Day Competition
* ARISS Report
* AMSAT Server Upgrade

SB SAT @ AMSAT $ANS-163.01
ARISSat-1 Reception Challenge

AMSAT News Service Bulletin 163.01
>From AMSAT HQ SILVER SPRING, MD.
June 12, 2011
To All RADIO AMATEURS
BID: $ANS-163.01

ARISSat-1 Reception Challenge

ARISSat-1 is scheduled for deployment from the ISS in July. It has a composite VHF downlink that will easily fit into the FUNcube Dongle receive spectrum. The telemetry is 1000 bps BPSK and can, of course, also be received with a normal SSB 2 metre receiver.

The expected signal levels from ARISSat should be similar to those we expect from FUNcube itself (and also eventually from UKube) and the team are keen to discover what will be the minimum and best type of antennas for schools to use with a FCD. Therefore user experience with the ARISSat signals will be very valuable in making this determination.

To encourage everyone to receive ARISSat signals we are offering a FUN reward for listeners!

There are a number of categories for this challenge including:

1. The first FCD user, from each continent, who can post a spectrum recording of the received signal together with evidence of decoding the data using the ARISSat software and of sending it to the ARISSat data warehouse.

2. The first non-FCD user, from each continent, who can provide evidence of having decoded the signals and of sending it to the ARISSat data warehouse.

3. The listener, using a FCD or not, who can demonstrate satisfactory reception of the telemetry in the same ways as described above, using the "smallest" possible receive antenna. The actual closing date for this part of the challenge will be announced later.

4. All other entrants who can demonstrate that they have been having FUN!

Please submit your "entries", including your location, station details (including FCD serial number where applicable), postal address and reports
to g0auk<at>amsat.org.

[ANS thanks AMSAT-UK and the Southgate ARC News Site for the above information]

/EX

SB SAT @ AMSAT $ANS-163.02
Call for papers

AMSAT News Service Bulletin 163.02
>From AMSAT HQ SILVER SPRING, MD.
June 12, 2011
To All RADIO AMATEURS
BID: $ANS-163.02

Technical papers are solicited for presentation at the 30th Annual ARRL and TAPR Digital Communications Conference to be held September 16-18, 2011 in Baltimore, Maryland. These papers will also be published in the Conference Proceedings (you do NOT need to attend the conference to have your paper included in the Proceedings). The submission deadline is July 31, 2011. Please send papers to:

Maty Weinberg
ARRL
225 Main St
Newington, CT 06111

Or... you can make your submission via e-mail to: maty@arrl.org

Papers will be published exactly as submitted and authors will
retain all rights.

[ANS thanks Steve, WB8IMY, at the ARRL for the above information]

/EX

SB SAT @ AMSAT $ANS-163.03
AMSAT-NA Board of Directors Nominations Due by June 15th

AMSAT News Service Bulletin 163.03
>From AMSAT HQ SILVER SPRING, MD.
June 12, 2011
To All RADIO AMATEURS
BID: $ANS-163.03

It is time to submit nominations for the upcoming open seats on the
AMSAT-NA Board of Directors. The deadline is June 15th. A valid
nomination requires either one Member Society, or five current
individual members in good standing, to nominate an AMSAT member
for the position.

Four director's terms expire this year:

Barry Baines, WD4ASW
Alan Biddle, WA4SCA
Drew Glasbrenner, KO4MA
Tony Monteiro, AA2TX

The four candidates receiving the highest number of votes will be
seated as full Board members for two year terms. The two candidates
receiving the next highest number of votes will be seated as alternate
Board members for one year terms.

Beginning this year, in addition to traditional submissions of written
nominations which remains unchanged and is the preferred method, initial
nominations may be made by electronic means.&#65533; These include e-mail,
FAX, or electronic image of a petition. Electronic petitions should be
sent to MARTHA@AMSAT.ORG or faxed to 301-608-3410. Written nominations,
consisting of names, calls, and individual signatures, should be mailed
to:

AMSAT-NA
850 Sligo Ave #600
Silver Spring, MD, 20910

No matter what method is used, petitions MUST arrive no later than June
15th at the AMSAT-NA office. If the nomination is a traditional written
nomination, no other action is required. If it is other than this, i.e.
electronic, a verifying traditional written petition MUST be received at
the AMSAT-NA office at the above address within 7 days following the
close of nominations on June 15th. ELECTRONIC SUBMISSIONS WITHOUT THIS
SECOND, WRITTEN VERIFICATION ARE NOT VALID UNDER THE EXIST- ING AMSAT-NA

BYLAWS.

Alan Biddle
WA4SCA
AMSAT Corporate Secretary

[ANS thanks Alan, WA4SCA, for the above information]

/EX

SB SAT @ AMSAT $ANS-163.04
New Items in AMSAT Store

AMSAT News Service Bulletin 163.04
>From AMSAT HQ SILVER SPRING, MD.
June 12, 2011
To All RADIO AMATEURS
BID: $ANS-163.04

Hot off the presses, you don't want to miss out on these new additions to the AMSAT online store for 2011.

The latest from Gould, WA4SXM, Getting Started With Amateur Satellites - 2011. Excellent for the beginner to learn the ins and outs of the most popular satellites. Also contains information on ARISSat-1, P3 Express and AMSAT Fox.

There is a new 2011 Frequency chart, updated May, 2011 by Mike, N1JEZ.

Catch a fly ball or keep the sun off your head with the new 2011 Baseball Cap

Show off your support for ARISSat-1 with a handsome red Polo Shirt or gray T-Shirt

Visit the AMSAT online store and see pictures and pricing to your door. http://www.amsat.org click on link in left margin.

73...bruce
(AMSAT online store manager)

[ANS thanks Bruce, KK5DO, for the above information]

/EX

SB SAT @ AMSAT $ANS-163.05
OM3BD Looking for North America Satellite Contacts

AMSAT News Service Bulletin 163.05
>From AMSAT HQ SILVER SPRING, MD.
June 12, 2011
To All RADIO AMATEURS
BID: $ANS-163.05

Bill, NZ5N says he is heading for his annual 7-week trip to Slovakia, grid locator JN88mf. He has been issued a new Slovak callsign OM3BD.

Bill wrote, "I will be active on the satellites. North American stations,

please contact me for OSCAR 7 mode B skeds, if we will have any mutual footprints. Time permitting, there's also a possibility of some portable operations to different grids, and/or satellite expeditions to Austria and Hungary Both are less than 20 miles from my Slovakian QTH."

Bill said last year he was able contact Ohio and Virginia via AO-7 from this location.

[ANS thanks Bill, NZ5N for the above information]

/EX

SB SAT @ AMSAT $ANS-163.06
Satellite Shorts From All Over

AMSAT News Service Bulletin 163.06
>From AMSAT HQ SILVER SPRING, MD.
June 12, 2011
To All RADIO AMATEURS
BID: $ANS-163.06

+ NASA has released photos of Endeavour docked at the International Space Station (ISS). These are the first ever images taken of a space shuttle while still attached to the orbiting lab complex from the perspective of a crewed Russian Soyuz spacecraft. The photos were captured by Italian astronaut Paolo Nespoli from the Soyuz TMA-20 vehicle as he and two crewmates were departing the ISS for their return trip to Earth. See: http://www.nasa.gov/mission_pages/station/multimedia/e27depart.html

+ NASA's Spirit rover on Mars stopped transmitting in March 2010 when it went silent at the onset of the cold and dark Martian winter. Assembled by Dr. Ken Kremer and Marco Di Lorenzo from publicly-avail able NASA imagery, these mosaics show Spirit's final resting place: http://spaceflightnow.com/news/n1106/05spirit/

+ NASA Science News posted "A Salute to Spirit" at: http://tinyurl.com/3ce4zp2 (science.nasa.gov)

+ Video of the June 7 Soyuz launch with NASA astronaut Mike Fossum, Russian cosmonaut Sergei Volkov and Japan Aerospace Exploration Agency astronaut Satoshi Furukawa can be viewed at the UniverseToday web site: http://tinyurl.com/6c2gews

+ A new yahoo group dedicated to Digital Amateur Television has been created. The purpose of the group is to share knowledge & experiences using & developing DATV technology for amateur use. You can join the group at: http://groups.yahoo.com/group/DigitalATV/ (Mark, WB9QZB)

+ Copenhagen Suborbital, a group of amateur rocketeers successfully launched the world's first amateur-built rocket made for human space travel. Two videos of the launch can be found at:

http://www.universetoday.com/86306/copenhagen-suborbitals-launch-videos/

+ Send an audio report of your SumbandilaSat contact and you may be one of 3 lucky winners drawn to receive a first day postal cover of the SumbandilaSat. Closing date is 30 June 2011. E-Mail to: saamsat@intekom.co.za (http://www.amsatsa.org.za/)

+ Martha at AMSAT Headquarters says she now has 7 Elk Antennas in stock. The cost is $125 plus shipping. She also has the bag which is $25. If you are interested, please call the AMSAT Office at 301-589-6062. A portion of your purchase price benefits AMSAT.

+ Andy, VK3ASI hopes to operate the FM satellites Oscar 50 and 51 from Spitsbergen next week. Some of the operation may be maritime mobile.

+ The Central States VHF Conference will convene in Irving, TX on July 29 - 30. Most attendees traveling from a good distance will arrive on July 28th and checkout on July 31st. Information will be posted at: http://www.csvhfs.org/

/EX

SB SAT @ AMSAT $ANS-163.07
Reminder-2011 AMSAT Field Day Competition

AMSAT News Service Bulletin 163.07
>From AMSAT HQ SILVER SPRING, MD.
June 12, 2011
To All RADIO AMATEURS
BID: $ANS-163.07

Field Day is June 25 & 26. Annual readiness excersize is a great way to demo Satellite Operations.

AMSAT Director of Awards, Bruce Paige, KK5DO says, "It's that time of year again: Summer and Field Day!"

Each year the American Radio Relay League (ARRL) sponsors Field Day as an emergency preparedness exercise. The event takes place during a 24-hour period on the fourth weekend of June. For 2011 the event takes place during a 27-hour period from 1800 UTC on Saturday June 25, 2011 through 2100 UTC on Sunday June 26, 2011. Those who set up prior to 1800 UTC on June 25 can operate only 24 hours.

The Radio Amateur Satellite Corporation (AMSAT) promotes its own version of Field Day for operation via the amateur satellites, held concurrently with the ARRL event.

Bruce advises, "If you are considering ONLY the FM voice satellites like AMRAD-OSCAR-27, SaudiSat-Oscar-50, or AMSAT-OSCAR-51 for your AMSAT Field Day focus. Don't, unless you are simply hoping to make one contact for the ARRL rules bonus points."

The congestion on FM LEO satellites was so intense in prior years that we must continue to limit their use to one-QSO-per-FM-satellite. This includes the International Space Station. You will be allowed

one QSO if the ISS is operating Voice. You will also be allowed one digital QSO with the ISS or any other digital, non- store-and-forward, packet satellite (if operational).

Please refer to these links for the full document of the AMSAT Field Day rules:
http://www.amsat.org/ (link on AMSAT.org front page to PDF file) And, an alternative site is:
http://www.amsatnet.com/2011fd.doc (MS-Word Doc File)
http://www.amsatnet.com/2011fd.pdf (PDF File)

These documents also cover the message exchange format, scoring requirements, reporting requirements, station classes, etc.

[ANS thanks AMSAT Director of Awards, Bruce Paige, KK5DO for the above information]

/EX

SB SAT @ AMSAT $ANS-163.08
ARISS Report

AMSAT News Service Bulletin 163.08
>From AMSAT HQ SILVER SPRING, MD.
June 12, 2011
To All RADIO AMATEURS
BID: $ANS-163.08

Amateur Radio on the International Space Station (ARISS) Status Report June 6, 2011

1. Amateur Radio Newsline on ARISS

On June 3, the Amateur Radio Newsline Report 1764 included a story on the new ARISS proposal process for U.S. schools. "Ham Radio in Space: New US Only Selection Process Announced for ARISS Contacts" may be found at: ftp://ftp.arnewsline.org/quincy/News/news.txt

2. Astronaut Training Status

An ARISS simulated contact is planned with Kevin Ford, KF5GPP on June 13. Ford is scheduled to fly with Expedition 33 in September 2012.

Don Pettit, KD5MDT and Andr&#65533; Kuipers, PI9ISS are scheduled for an ARISS preflight session on June 22. The two astronauts are part of Expedition 30 which will launch in November 2011.

3. ARISS Presentations at Ham-Com 2011

The American Radio Relay League (ARRL) National Convention will be held at the Ham-Com 2011 in Plano, Texas on Friday and Saturday, June 10 - 11. Several ARISS presentations will be given during the event:

ARISSat-1 a Satellite for STEM Education and Fun
Presented by Keith Pugh, W5IU

Amateur Radio on the International Space Station
Presented by Kenneth Ransom, N5VHO

Introduction to Amateur Radio Satellites
Presented by Douglas Quagliana, KA2UPW

For more information, see: http://www.hamcom.org

[ANS thanks Carol Jackson, KB3KLI, for the above information]

/EX

SB SAT @ AMSAT $ANS-163.09
AMSAT Server Upgrade

AMSAT News Service Bulletin 163.09
>From AMSAT HQ SILVER SPRING, MD.
June 12, 2011
To All RADIO AMATEURS
BID: $ANS-163.09

AMSAT Server Upgrade News

AMSAT's network manager Paul Williamson, KB5MU reminded users of the http://www.amsat.org features and news that, "The AMSAT.ORG computer has been upgraded and moved to a new location. Although it still remains on the UCSD campus, the new location required that a new IP address be assigned. The transition should theoretically be seamless, but some users may have trouble until their network's DNS servers take notice of the update."

Unless your network admin has done something unusual, any problems should clear up by themselves within a few days at most.

Please report any ongoing problems to Paul via kb5mu@amsat.org or paul@mustbeart.com if the problem prevents email from getting through to amsat.org.

[ANS thanks Paul Williamson, KB5MU for the above information]

/EX

73,
This week's ANS Editor,
Dee Interdonato, NB2F

83. Weekly Highlights of Solar and Geomagnetic Activity, 06 - 12 June 2011

Newsgroup: rec.radio.amateur.space
Date: 2011-06-14 21:30:05 UTC
From: SWPC.Webmaster@noaa.gov
Message-ID: <20110614213001.7453C33C5F@panix2.panix.com>
Source record: 309
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.info

```
:Product: Weekly Highlights and Forecasts
:Issued: 2011 Jun 14 1847 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
# Weekly Highlights and Forecasts
#
Highlights of Solar and Geomagnetic Activity
06 - 12 June 2011

Solar activity has been at very low to moderate levels during the
period. Activity began at low levels on 06 June, when Region 1226
(S21, L=036, Eki/360 on 29 May) produced two C-class flares, a C1
flare at 06/0135Z and a C1 flare at 06/0950Z. A 12-degree long
filament, centered near N25W34, erupted during the period. SDO/AIA
193 imagery revealed material movement along a large filament
channel, first visible at 06/0441Z, which continued through about
06/0900Z. Activity increased to moderate levels on 07 June as Region
1226 produced a M2/2N. Associated with this event was a Type II
radio sweep, a Type IV Radio Sweep, a Tenflare of 710 sfu, and a
full halo asymmetric CME with an estimated plane of sky speed of
1155 km/s. Discrete radio emissions included 1415 MHz - 15400 MHz.
Activity decreased to very low levels on 08 June. Activity increased
to low levels during 09-10 June as Region 1226 produced two C-class
flares, a C1/Sf at 09/0321Z and a C4/Sf at 09/0348Z. Region 1234
(S16, L=245, Bxo/010 on 09 June) also produced a C1 flare at
09/1028. From around the west limb, Region 1226 produced a final C2
flare at 10/1751Z. Activity decreased to very low levels for the
remainder of the period.

The 10 MeV proton flux exceeded 10 pfu, beginning at 07 June/0820Z,
reaching maximum at 07/1820Z, and ending at 08/1710Z. The maximum 10
MeV flux was 73 pfu. The 100 MeV proton flux exceeded 1 pfu,
beginning at 07/0720Z, reaching maximum at 07/1025Z, and ending at
08/0210Z. The maximum 100 MeV flux was 4 pfu.

The greater than 2 MeV electron flux at geosynchronous orbit was at
normal to moderate levels during 06-08 June. Fluxes increased to
moderate to high levels during 09-10 June. Flux levels decreased to
moderate levels during 11-12 June.

The geomagnetic field ranged from quiet to minor storm levels during
the period. Activity on 06 June began at unsettled to active levels,
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with an isolated minor storm at high latitudes, due to the continued effects of a coronal hole high speed stream (CH HSS) and the arrival the 02 June CME. On 07 June, solar wind speeds, as measured by the ACE spacecraft, increased from 380 km/s to around 480 km/s, following a density spike. These characteristic appear to be the arrival of another CH HSS. From 07- 09 June, activity stayed at quiet to active levels with an isolated minor storm period from 08/0000-0300Z as effects of the CH HSS continued. On 10 June, quiet to unsettled levels were observed with an isolated minor storm period at high latitudes as measurements by the ACE spacecraft indicate the likely arrival of the CME from 07 June. Quiet to active levels were observed from 11-12 June, as a solar sector boundary crossing was observed, preceding another CH HSS.

Forecast of Solar and Geomagnetic Activity
15 June - 11 July 2011

Solar activity is expected to be at very low levels with a slight chance for C-class flares during 15-20 June. Activity is expected to increase to low to moderate levels, with a slight chance for M-class flares during 22 June - 04 July, as old Region 1226 returns. Very low to low levels are expected for the remainder of the period.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at high levels from 15-18 June. Normal to moderate levels are expected from 19 - 22 June. An increase to high levels from 23 - 27 June is forecast. Normal to moderate levels are expected for the remainder of the period.

The geomagnetic field is expected to decrease to mostly quiet levels during 15-21 June. Activity is expected to increase to quiet to unsettled levels, with isolated active levels on 22 - 25 June, due to a CH HSS. Activity is expected to decrease to predominantly quiet levels from 26 June - 01 July. Activity is expected to increase to quiet to unsettled levels, with isolated active levels from 02 - 03 July, as another CH HSS becomes geoeffective. Activity is expected to decrease to predominantly quiet levels from 04 - 07 July. Activity is expected to increase to quiet to unsettled levels on 08-09 July as a CH HSS moves into a geoeffective position. Predominantly quiet levels are expected for the remainder of the period

84. ANS-170 AMSAT News Service Weekly Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2011-06-19 01:34:24 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <000801cc2e20$fc7e5270$f57af750$@net>
Source record: 310
Cross-posted to: rec.radio.amateur.space,rec.radio.info

AMSAT NEWS SERVICE
ANS-170

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* AMSAT-NA Files Formal Comments on Proposed ITAR Changes
* Announcing AMSAT Project FOX Website
* It's Time to Get Ready For ARISSat-1
* ARRISat-1 Team Pointers to Get Ready for SSTV Reception
* North America SO-67 Schedule For Field Day
* Visit the New AMSAT-UK Website
* AMSAT-UK Display at First UK Space Conference
* Satellite Shorts From All Over
* Follow Up to Receiving STEREO-B at 219 Million KM

SB SAT @ AMSAT $ANS-170.01
AMSAT-NA Files Formal Comments on Proposed ITAR Changes

AMSAT News Service Bulletin 170.01
>From AMSAT HQ SILVER SPRING, MD.
June 19, 2011
To All RADIO AMATEURS
BID: $ANS-170.01

AMSAT submitted comments to the U.S. Department of State/Directorate of Defense Trade Controls (DDTC) on June 13, 2011 in response to their proposed rule making on International Traffic in Arms Regulations (ITAR), which would provide clarification on defense services, noting that public domain material is not subject to ITAR.

AMSAT asked DDTC to not only acknowledge that public domain materials are not subject to ITAR, but to expand the scope of how they view how materials are to be placed in the public domain. AMSAT requested that rather than focus on the method of placement of materials in the public domain (e.g. printed publication), the critical criteria should be the intent of the originator to broadly and freely make such material available to anyone who has the ability to access it via appropriate

means, including electronic origination and distribution.

The full copy of AMSAT's comments will be published in an upcoming edition of the AMSAT Journal. An electronic copy of AMSAT's comments can be viewed on the AMSAT web at: http://tinyurl.com/3jtbff2

[ANS thanks AMSAT President Barry Baines, WD4ASW for the above Information]

/EX

SB SAT @ AMSAT $ANS-170.02
Announcing AMSAT Project FOX Website

AMSAT News Service Bulletin 170.02
>From AMSAT HQ SILVER SPRING, MD.
June 19, 2011
To All RADIO AMATEURS
BID: $ANS-170.02

Alan Biddle, WA4SCA is pleased to announce that AMSAT's Project FOX website has been updated. Titled, "Introducing FOX, AMSAT-NA's Next Satellite!", this page brings you the highlights of:

+ "Why do we need Fox?"
+ A link to the Project FOX presentation slides from the Dayton AMSAT Forum
+ A Project FOX donation widget
+ FOX Project Status
+ High level project design goals
+ A call for volunteers to join the AMSAT FOX Team

Begin your exploration of the AMSAT FOX project at:
http://www.amsat.org/amsat-new/fox/

Here is a summary of AMSAT Project FOX design goals:

Development Phase: Approved by the Board of Directors.
Design in progress.
Projected Launch: 2013.
Space Frame Structure: Standard 1U (One Unit) CubeSat.
Space Frame Size: 10 cm X 10 cm X 10 cm.
Mass: Approximately 1.33 kg, ~ 3 lbs.
Orbit: 600 - 800 km, circular, depending on launcher.
RF: 500 mW EIRP, U/V (Mode B). Deployable antennas.
Transponder: High density Software Defined Transponder (SDX).
Power source: Deployable solar arrays. Lithium Ion or NiCd batteries.
Power mangement: Maximum Power Point Trackers.

[ANS thanks Alan Biddle, WA4SCA for the above information]

/EX

SB SAT @ AMSAT $ANS-170.03
It's Time to Get Ready For ARISSat-1

AMSAT News Service Bulletin 170.03
>From AMSAT HQ SILVER SPRING, MD.
June 19, 2011
To All RADIO AMATEURS
BID: $ANS-170.03

A few weeks remain before the planned July deployment of ARISSat-1 from the ISS. The AMSAT News Service will bring you more details in the coming weeks. Here are some reminders to help you get your station ready for ARISSat-1 operation.

145.950 MHz FM Downlink:

FM transmissions will cycle between a voice ID as RS01S, select telemetry values, 24 international greeting messages in 15 languages and SSTV images. One of the messages will be a conversation between Yuri Gagarin and ground control. See the next news item for pointers to get your station ready to receive the SSTV images.

435 MHz - 145 MHz Linear Transponder:

The linear transponder will operate in Mode U/V (70 cm Up, 2m Down). It is an 16 KHz wide inverting passband and the convention will be to TX LSB on the 435 MHz uplink and RX USB on the 145 MHz downlink. This mode is designed to work with low power transmitters and omni antenna.

145.919 MHz/145.939 MHz CW Beacon:

The CW transmissions will be callsign ID RS01S, select telemetry, and callsigns of people actively involved with the ARISS program.

145.920 MHz SSB BPSK-1000 Telemetry:

The BPSK transmissions will feature a new 1kBPSK protocol developed by Phil Karn, KA9Q to be readable in low signal level conditions. The BPSK data will transmit satellite telemetry.

The ARISSat-1 BPSK-1000 downlink is transmitted in SSB mode on 145.920 MHz. When the CW2 beacon on 145.919 MHz is active this indicates that the BPSK-1000 format is being transmitted. If the CW1 beacon on 145.939 MHz is active this indicates the backup of BPSK-400 format is being transmitted.

Transmitting at 100 mW, both BPSK rates include Forward Error Correction (FEC) and it is expected that modest quarter-wave antennas with low-loss coaxial cable will provide sufficient signal strength for decoding and display by the ARISSatTLM software.

An audio feed from an SSB receiver to the computer's soundcard input is needed. An initial "Receive Only" configuration is easily

done consisting of an audio patch cable between your radio and
the soundcard. Take the speaker or headphone output from the radio
and run it into the line (or mic) input on your PC sound card.

BPSK-1000 sounds like a "shusssch" with a higher pitch than the
400 bps growl. It is difficult to tune by ear. The CW2 beacon is
used as a tuning signal for BPSK-1000. The PC and Mac ARISSatTLM
software display contains a dotted line that you use to tune your
receiver until the CW signal bumps lines up with the dotted line
on your PC screen. This will allow you to decode the BPSK-1000
signal and you will also be able to copy the CW2 beacon.

Download the Windows ARISSatTLM free ground station soundcard
demodulator and display software:
http://www.arissattlm.org/download/ARISSatTLM_050_Setup.exe

Download the Mac ARISSatTLM software:
http://www.arissattlm.org/download/ARISSATTLM.zip

The ARISSatTLM software user guide is available:
http://tinyurl.com/42uhtyf (amsat.org)

Get your color ARISSat-1 Frequency Guide:
http://tinyurl.com/4t497t2 (amsat.org)

ARISSat-1 Presentation Slides (~1MB)
http://tinyurl.com/4n4pzkm (amsat.org)

[ANS thanks the ARISSat-1 Team for the above information]

/EX

SB SAT @ AMSAT $ANS-170.04
ARRISat-1 Team Pointers to Get Ready for SSTV Reception

AMSAT News Service Bulletin 170.04
>From AMSAT HQ SILVER SPRING, MD.
June 19, 2011
To All RADIO AMATEURS
BID: $ANS-170.04

The ARISSat-1 FM downlink on 145.950 MHz includes live SSTV
images as part of the cycling voice ID, select spoken telemetry
values, and the international greeting messages. Here are some
pointers to help you get your station ready to receive and dis-
the SSTV pictures transmitted by ARISSat-1.

One fun feature is that there are four SSTV cameras mounted on
the spacecraft. On photos of ARISSat-1 you may have noticed black
brackets on the outside of the spacecraft. These hold the mirrors
that reflect the light onto the lens of the cameras. The software-
defined-transponder will use the image data from the cameras to
generate the SSTV downlink.

ARISSat's software will sequentially select a new or stored image
from one the four cameras. There are two pre-recorded images as
part of the sequence. The camera that took the the picture can be
identified by the color of the call sign in the upper left of the
SSTV image. The SSTV image will be sent down as FM audio SSTV in
Robot 36 format on 145.950 MHz about every 140 seconds.

The RF downlink power on the 145.950 MHz FM downlink will be 250mW
which is predicted to provide a link margin around 6 dB on an HT
with a 'big whip' when the satellite is at 15 degrees elevation. This
should be sufficient to receive SSTV pictures although you may need
to orient the whip to line up the antenna polarization.

ARISSat-1 is not stabilized so the antenna orientation is unpredict-
able and a certain amount of fading will happen. The receiving link
margin may be improved with a handheld beam such as an "Arrow", "Elk",
or "Cheap Yagi" antenna.
(See: http://www.wa5vjb.com/references/Cheap%20Antennas-LEOs.pdf)

General Overview Radio-to-Soundcard Interface

To view the SSTV downlink from ARISSat-1 you'll need a computer
running SSTV software for your soundcard and an audio connection
between your radio and the computer.

If you are already on the air with other amateur radio soundcard
applications chances are you are ready to receive ARISSat's SSTV
downlink with little or no modification to your setup.

The audio from the radio to the computer is the key link. An initial
"Receive Only" configuration is easily done consisting of an audio
patch cable between your radio and the soundcard. Take the speaker
or headphone output from the radio and run it into the line (or mic)
input on your PC sound card.

Setting the level is simple also as the MMSSTV software has a bar
indicator. Just adjust the sound card gain slider and/or radio volume
control so that the SSTV signal is within the center part of the bar.
MMSSTV will give you an "overflow" indication if the volume is too
high.

If your rig has a 'Line Out' connection this can be run to the
soundcard 'Line In'. Using the radio 'Line Out' you won't have to
deal with the interaction of the radio's volume control with the
soundcard levels. But you will still need to use the soundcard
'Volume Control' to set the 'Line In' levels.

SSTV Software Download Sites

There are many amateur radio SSTV software decoding applications
available. One of the easiest to use on Windows computers is the
MMSSTV program. This can be downloaded from:
http://mmhamsoft.amateur-radio.ca/pages/mmsstv.php

The Ham Radio Deluxe software package also includes SSTV operation.

SSTV software for the Mac is available at:
http://web.me.com/kd6cji/MacSSTV/MultiScan.html

[ANS thanks the ARISSat-1 Team for the above information]

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SB SAT @ AMSAT $ANS-170.05
North America SO-67 Schedule For Field Day

AMSAT News Service Bulletin 170.05
>From AMSAT HQ SILVER SPRING, MD.
June 19, 2011
To All RADIO AMATEURS
BID: $ANS-170.05

The SO-67 command station has agreed to set the following start
times for 15 minute activations over North America for Field Day.

Activations are -planned-, and are dependent on scheduling and
battery state:

25 JUN 2011

1835
2255

26 JUN 2011

0030
0200
0335
0515
0645
1155
1335
1510
1640
1815

Uplink is 145.875, no tone, and Narrow FM if possible.
Downlink is 435.345, +/- Doppler shift.

Remember both ARRL and AMSAT Field Day rules limit QSOs to one per
FM repeater/satellite. Even if you are not submitting a log, please
adhere to this procedure.

The above information along with additional Field Day information and
links to the FD Rules documents can found on the AMSAT front page at:
http://www.amsat.org.

[ANS thanks AMSAT VP Operations Drew Glasbrenner, KO4MA for the
above information]

/EX

SB SAT @ AMSAT $ANS-170.06
Visit the New AMSAT-UK Website

AMSAT News Service Bulletin 170.06
>From AMSAT HQ SILVER SPRING, MD.
June 19, 2011
To All RADIO AMATEURS
BID: $ANS-170.06

AMSAT-UK has a new website developed by Dominic Hawken G6NQO and the new webmaster is Rob Styles M0TFO.

The site features links to the new AMSAT-UK Online shop run by Ciaran Morgan, M0XTD. The online shop carries a range of hardware items/projects and software suitable for Amateur Ratio Satellite activities as well as the ability to join/renew your membership to AMSAT-UK.

Visit the new site at
http://www.uk.amsat.org/

The AMSAT-UK International Colloquium takes place July 30-31. The event is open to all and further information can be found at
http://www.uk.amsat.org/colloquium-2011

AMSAT-UK publishes a color A4 newsletter, OSCAR News, which is full of Amateur Satellite information. Join online at:
http://tinyurl.com/JoinAMSAT-UK

[ANS thanks Trevor, M5AKA for the above information]

/EX

SB SAT @ AMSAT $ANS-170.07
AMSAT-UK Display at First UK Space Conference

AMSAT News Service Bulletin 170.07
>From AMSAT HQ SILVER SPRING, MD.
June 19, 2011
To All RADIO AMATEURS
BID: $ANS-170.07

AMSAT-UK will have a presence at the first ever UK Space Conference taking place at the University of Warwick on July 4-5. This is being organised by the UK Space Agency which was formally commenced in April this year.

AMSAT-UK has been sponsored by a member to have a small stand "booth" in the exhibtion area and will be among some very illustrious company.

AMSAT-UK will be displaying FUNcube models and demonstrating the educational outreach possibilities that we will have with the telemetry and Fitter message download systems when matched with a simple groundstation - the FUNcube dongle.

AMSAT-UK members will also be presenting short papers in the educational and cubesat streams during the event.

Full information of the conference can be read on-line at:
http://tinyurl.com/3hb2y9j (www.intellectuk.org)

[ANS thanks Graham Shirville, G3VZV for the above information]

/EX

SB SAT @ AMSAT $ANS-170.08
Satellite Shorts From All Over

AMSAT News Service Bulletin 170.08
>From AMSAT HQ SILVER SPRING, MD.
June 19, 2011
To All RADIO AMATEURS
BID: $ANS-170.08

+ AMSAT has received the sad news on the passing of Elizabeth Clark, wife of AMSAT Board Member Tom Clark, K3IO. A memorial service in the Washington, DC area will be held in the near future - Martha will post the details when available. A service will be held in about one month in Clinton, South Carolina at the family church where her ashes will be scattered. Donations can be made in Elizabeth's name to: The American Cancer Society, Box 22718, Oklahoma City, OK 73123-1718, The Susan G Komen for the Cure, ATTN: Donor Services, Box 650309, Dallas TX 75265-0309 or the charity of your choice. (Martha at the AMSAT office)

+ The AO-51 Command Team notes that over the last couple of days, we have been seeing some extended operational times after turning AO-51 ON. Your reports from around the world for the next few days will be especially helpful! Information about when it's ON and when it's OFF is of great interest right now and for the next few days. The best place to let everybody know is at: http://oscar.dcarr.org/
(AO-51 Command Station, Mark, N8MH)

+ The AMSAT Office has received notice that the Canadian Postal Strike may affect delivery of AMSAT mailings to Canada. Canada Post has currently suspended operations around the country.

+ Congratulations to the following on earning the new 5 in EM55 Award for working five (5) different hams in the EM55 grid:

CALL	AWARD NUMBER	ISSUE DATE
WA4NVM	1	6/4/2011
WA4HFN	2	6/4/2011
KI4OTG	3	6/4/2011
K8YSE	4	6/4/2011
N9AMW	5	6/5/2011
KB0RZD	6	6/14/2011
W5KUB	7	6/17/2011

You do not have to be in your home grid to count the stations worked. There are several satellite ready hams in EM55. Here is the current known list: WA4NVM, WA4HFN, WB4LHD, WA4OVO, KI4OTG, KD4NOQ, KJ4BIX, AND AJ4KF.

Send your log to WA4NVM or WA4HFN for checking, along with your current mailing address. The award is free and should any donations be sent, they will be forwarded to AMSAT along with your call and name.

This award will be effective 1 June 2011, therefore, all contacts must be on or after this date.

+ Trevor, M5AKA invites you to view these video features on the Southgate ARC web site:
Video of Astronaut Doug Wheelock KF5BOC at Dayton
http://www.southgatearc.org/news/june2011/kf5boc_video.htm

ISS contact with students in Enniskillen can be seen at
http://www.southgatearc.org/news/june2011/college_congratulated.htm

+ Congratulations to AMSAT's Bob McGwier, N4HY on his new postion as the Director of Research Hume Center for National Security and Technology and Research Professor, ECE at Virginia Tech. See:
http://tinyurl.com/3cnxop7 (vt.edu)

+ Congratulations to Astronaut Mike Hopkins (Expedition 37) upon passing his amateur radio Technician License exam on June 9.
His call sign should be issued soon.

+ The Okaw Valley ARC has a very nice web page devoted to their May 6 ISS contact by the Greenville Elementary School. Video is included: http://ovarc.net/isscontact.htm

+ If you captured any of the Phonesat UHF beacon data during the NASA AMES high altitude balloon flight on June 9 please send it to:
mikesafyan@gmail.com

+ Congratulations to Chris, KC0YBM, for achieving his Satellite VUCC Award #215!

+ Paul, 2E1EUB will be operating mobile on AO-7 and other satellites from the Islands of Harris and Lewis, off the west coast of Scotland for about 2 weeks between July 2-11. During this trip Paul will also be mobile in northern Scotland and the Island of Skye. He will also post information on his QRZ.com callsign lookup for 2E1EUB.

+ The next Hudson Valley Satcom Net is scheduled for June 23 at 8PM EDT (UTC-4) on the 146.970 MHz repeater, (Pl 100), and also on Echolink node N2EYH-L. More info: http://www.hvsatcom.org (Stu, WA2BSS)

+ Paul, VP9MU says he has re-activated the AMSAT-BDA (Bermuda) web pages at: http://www.amsat-bda.org The main function of the site is hosting the General Astrodynamics Library and will be hosting additional items in the future.

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-170.09
Follow Up to Receiving STEREO-B at 219 Million KM

AMSAT News Service Bulletin 170.09
>From AMSAT HQ SILVER SPRING, MD.
June 19, 2011
To All RADIO AMATEURS
BID: $ANS-170.09

James Miller, G3RUH sent an interesting follow up to the ANS news of AMSAT-DL success in receiving the 8 GHz downlink from the solar observation STEREO-B satellite. A FUNcube dongle and downconverter were used in the the demonstration documented in the videos on the Southgate ARC site (See: http://tinyurl.com/6eukmjv - "AMSAT-DL break FUNcube Dongle distance record).

James wrote, "Actually, the Stereo-A and Stereo-B spacecraft are received (more conventionally) every day, and the data automatically forwarded to NASA. The Bochum Dish, operated by AMSAT-DL is one of four "Partner Stations" downloading the low speed Beacon telemetry for NASA/NOAA. The others are DL0SHF at Kiel, CNES in Toulouse, France, and NICT at Koganei, Japan. And one more station is urgently needed, especially from North America."

There is a comprehensive article about this work at:
http://www.amsat.org/amsat/articles/g3ruh/127.html

Data is transmitted from STEREO in one of two modes; (a) high speed (currently 720 kbps), stored data (up to 1 Gb), intended for the Deep Space Network (DSN) to collect the high resolution science data some 8 hours/day, and (b) a low speed 633 bps continuous real time subset of the solar data intended for collection by smaller ground stations.

AMSAT collects low speed data. The ground stations then forward the data via the Internet to NASA GSFC for processing where it is posted on the web in near real time for all to use, including the various world wide organizations monitoring and predicting Space Weather. The ground network for the low speed data is organized and coordinated by the SWPC in Boulder, Colorado.

The spacecraft transmit 63 watts to a 1.1m dish at 8.4 GHz RHCP, an e.i.r.p. of approximately 85 dBm.

[ANS thanks James, G3RUH for the above information]

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In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office. And, with that

please keep in mind the ham who figured he had some explaining to do when his young daughter announced, "I'm just like mommy! I put on the Oil of Old Lady lotion you said she uses!"

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

85. Weekly Highlights of Solar and Geomagnetic Activity, 13 - 19 June 2011

Newsgroup: rec.radio.amateur.space
Date: 2011-06-21 21:30:07 UTC
From: SWPC.Webmaster@noaa.gov
Message-ID: <20110621213001.F14A033C5F@panix2.panix.com>
Source record: 311
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.info

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:Product: Weekly Highlights and Forecasts
:Issued: 2011 Jun 21 1906 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
# Weekly Highlights and Forecasts
#
Highlights of Solar and Geomagnetic Activity
13 - 19 June 2011

Solar activity ranged from very low to moderate levels during the
period. The period began with low levels on 13 June with a C1 x-ray
event at 13/0055 UTC from an area on the east limb near N20. A
partial halo CME (estimated plane-of-sky speed of 600 km/s) was
observed off the southeast limb; first observed in C2 SOHO LASCO
imagery at 13/0424 UTC, also observed in C3 imagery at 13/0454 UTC.
Activity increased to moderate levels on 14 June when an M1 X-ray
event occurred at 14/2147 UTC from Region 1236 (N17, L=166,
class/area Ehi/350 on 16 June). A north-south oriented filament
channel erupted near the southeast limb between 0609 and1500 UTC on
14 June. A partial halo CME off the east limb was associated with
the filament eruption (first seen in STEREO-Behind COR2 imagery at
14/1500 UTC). The plane-of-sky speed was estimated at approximately
750 km/s. Activity decreased to low levels for 15 - 17 June. Two
C-class X-ray flares were observed on 15 June: a C2/Sf at 15/1150
UTC from Region 1236, and a C3/1f at 15/1432 UTC from Region 1234
(S16, L=246, class/area Dsi/150 on 19 June). Four C-class events
were observed on 16 June. The most significant was a C7/1N at
16/1022 UTC from Region 1236 associated with weak radio emissions in
the 2695 MHz to 15.4 GHz range, including a 130 sfu 10cm burst. Two
C-class flares were observed on 17 June: C1/Sf X-ray flare on
17/2313 UTC and a C3/Sn X-ray flare at 17/2342 UTC from Region 1234.
Activity decreased to very low levels on 18 June. Activity returned
to low levels on 19 June as two C-class events were observed. The
most significant was a C4 event from Region 1234 at 19/1522 UTC.

The greater than 10 MeV proton flux at geosynchronous orbit was
slightly enhanced during 12-18 June (peak 8 pfu at 17/0805 UTC),
likely associated with an eruptive prominence on the limb at 10/1828
UTC.

The greater than 2 MeV electron flux at geosynchronous orbit was at
normal to moderate levels during the period.
```

Geomagnetic activity ranged from quiet to minor storm levels during the period. Activity was at quiet to unsettled levels, with an isolated active period at high latitudes on 13-14 June due to a coronal hole high speed stream (CH HSS). Activity was at quiet levels on 15 - 16 June. A geomagnetic sudden impulse (SI) was observed at Boulder at 17/0244 UTC (31 nT) and indicated the arrival of the partial-halo CME observed in C2 SOHO LASCO imagery at 13/0424 UTC. The geomagnetic field was at quiet to unsettled levels, with isolated active and minor storm periods at high latitudes. Activity decreased to quiet levels for 18-19 June.

Forecast of Solar and Geomagnetic Activity
22 June - 18 July 2011

Solar activity is expected to be at low levels, with a slight chance for isolated M-class flares during 22 - 27 June. Activity is expected to decrease to very low to low levels during the rest of the period as Region 1236 departs. Activity is expected to remain very low until 03 July with the return of old Region 1234. Activity is then expected to be low with a chance for isolated M-class activity for the remainder of the forecast period.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at normal to moderate levels from 22 - 24 June. An increase to high levels is expected for 25 June - 01 July due to a recurrent CH HSS. A brief return to normal to moderate levels is expected on 02 July and then high levels are expected once again from 03 - 05 July due to another recurrent CH HSS. Normal to moderate levels are expected for the remainder of the period.

Geomagnetic field activity is expected to be mostly quiet on 22 - 23 June. An increase to mostly active conditions is expected on 24 June with a chance for isolated minor to major storm periods due to the combination of the CH HSS and a halo CME observed early on 21 June. Unsettled to active conditions are expected from 25 - 26 June as the effects persist. The geomagnetic field is expected to be quiet to unsettled on 26 - 28 June as the disturbance subsides. Quiet conditions are expected from 29 June - 01 July. An slight increase to quiet to unsettled conditions is expected from 02 - 03 July due to another recurrent CH HSS followed by a return to quiet conditions until 07 July. A third CH HSS is expected to bring unsettled conditions from 08 - 09 July. Predominately quiet conditions are expected until the arrival of a fourth CH HSS due to arrive on 17 July. Quiet to unsettled conditions are expected for the remainder of the period.

86. ANS-177 AMSAT News Service Weekly Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2011-06-26 13:38:21 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <001201cc3406$4b8a1350$e29e39f0$@net>
Source record: 312
Cross-posted to: rec.radio.amateur.space,rec.radio.info

AMSAT NEWS SERVICE
ANS-177

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* Remember to Send Your AMSAT Field Day Results
* 13 Colonies Special Event on Satellites Again
* July 15 Deadline to File ARISS Contact Proposals
* Istanbul students plan 145/435 MHz satellite
* New Horizons Mission Presents New Opportunity for Citizen Scientists
* Satellite Shorts From All Over
* ARISS Status - 20 June 2011

SB SAT @ AMSAT $ANS-177.01
Remember to Send Your AMSAT Field Day Results

AMSAT News Service Bulletin 177.01
From AMSAT HQ SILVER SPRING, MD.
June 26, 2011
To All RADIO AMATEURS
BID: $ANS-177.01

AMSAT Director of Awards and Contests, Bruce Paige, KK5DO reminds you to send in your satellite Field Day results. The Satellite Summary Sheet (on pages 3-4 of the AMSAT Field Rules) should be used for submission of the AMSAT Field Day competition.

The Rules and the Satellite Summary Sheet can be downloaded from links at http://www.amsat.org or http://www.amsatnet.com

http://tinyurl.com/3eztlaf (amsat.org)
http://www.amsatnet.com/2011fd.doc
http://www.amsatnet.com/2011fd.pdf

Your entry must be received by KK5DO (email or postal mail) by 11:59 P.M. CDT, Monday, July 11, 2011. The preferred method for submitting your log is via e-mail to kk5do@amsat.org or kk5do@arrl.net.

You may also use the postal service but give plenty of time for your results to arrive by the submission date. Add photographs or other interesting information that can be used an article for the Journal.

You will receive an email back (within one or two days) from Bruce when he receives your email submission. If you do not receive a confirmation message, try sending it again or send it to his other email address.

If mailing your submission, the address is:

Bruce Paige, KK5DO
Director of Awards and Contests
PO Box 310
Alief, TX 77411-0310.

Certificates will be awarded to the first-place emergency power/ portable station at the AMSAT General Meeting and Space Symposium in November 2011. Certificates will also be awarded to the second and third place portable/emergency operation in addition to the first-place home station running on emergency power. Stations submitting high, award-winning scores will be requested to send in dupe sheets for analog contacts and message listings for digital downloads.

[ANS thanks AMSAT Director of Awards and Contests, Bruce Paige, KK5DO for the above information]

/EX

SB SAT @ AMSAT $ANS-177.02
13 Colonies Special Event on Satellites Again

AMSAT News Service Bulletin 177.02
From AMSAT HQ SILVER SPRING, MD.
June 26, 2011
To All RADIO AMATEURS
BID: $ANS-177.02

Dave, KB1PVH/K2H says that the Original 13 Colonies Independence Week Special event begins on July 1 and runs until July 5.

We will be on the satellites again this year!

MA- KB1PVH/K2H, Dave
VA- NL7VX/K2B, Steve
PA- KE3LB/K2M, John
SC- K4YYL/K2L, Art
GA- N3TL/K2G, Tim
NC- W4MPS/K2J, Marc
NY- WB2OQQ/K2A, Pete
CT- KA1TCH/K2D, Al
NH- NE1H/K2K, Bob
RI- N1MIW/K2C, Larry
NJ- KB2M/K2I, Jeff (when available)

DE- KB2M/K2E, Jeff (limited time marine mobile)
MD- WA3SWJ/K2F, Bruce

Please limit yourselves to one contact per state, so that others may have a chance.

The 4th of July, 2011 lands on a Monday, which means that you can work us starting Friday through Tuesday. Due to popular demand, we will run the event all 5 days like in 2010. Times will be: 12:01 AM Eastern start on July 1st, (That's one minute after midnight, early Friday morning, July 1st) to 11:59 PM Eastern ending on July 5th (One minute to midnight, late Tuesday night, July 5th).

Hope everyone get a Clean Sweep

Find more information on-line at:
http://www.13colonies.info/

[ANS thanks Dave, KB1PVH/K2H for the above information]

/EX

SB SAT @ AMSAT $ANS-177.03
July 15 Deadline to File ARISS Contact Proposals

AMSAT News Service Bulletin 177.03
From AMSAT HQ SILVER SPRING, MD.
June 26, 2011
To All RADIO AMATEURS
BID: $ANS-177.03

NASA is seeking U.S. formal and informal education institutions and organizations, individually or working together, to host an Amateur Radio on the International Space Station, or ARISS, contact between the dates of Jan. 15 and July 15, 2012.

To maximize these radio contact opportunities, NASA is looking for organizations that will draw large numbers of participants and integrate the contact into a well-developed education plan. The deadline to submit a proposal is July 15, 2011.

During the first six months of 2012, crew members aboard the International Space Station will participate in amateur radio contacts.

ARISS contacts afford education audiences the opportunity to learn firsthand from astronauts what it is like to live and work in space. Due to the nature of human spaceflight, organizations must demonstrate the flexibility to accommodate changes in contact dates and times.

Interested parties should contact Teaching From Space to obtain information related to expectations, content, format, audience, proposal guidelines and forms by sending an e-mail to JSC-TFS-ARISS@mail.nasa.gov

or by calling 281-244-2320.

The NASA Teaching From Space web page can be found at:
http://tinyurl.com/6fc2lzn (nasa.gov)

[ANS thanks ARISS and NASA for the above information]

/EX

SB SAT @ AMSAT $ANS-177.04
Istanbul students plan 145/435 MHz satellite

AMSAT News Service Bulletin 177.04
From AMSAT HQ SILVER SPRING, MD.
June 26, 2011
To All RADIO AMATEURS
BID: $ANS-177.04

Students at Istanbul Technical University are working on a 3U CubeSat that will carry a linear transponder for SSB/CW amateur radio communications.

TURKSAT-3USAT will carry a 50kHz bandwidth 145/435 (V/U) linear transponder, beacon and telemetry downlink. It is hoped to have an early 2012 launch into a Sun Synchronous Orbit (SSO) at around 680km.

Istanbul Technical University's first Communication Satellite
http://tinyurl.com/6hyxh7h

Istanbul Technical University TURKSAT-3USAT
http://tinyurl.com/5vhdnzm

TURKSAT-3USAT on the IARU Satellite Frequency Coordination pages
http://www.amsatuk.me.uk/iaru/formal_detail.php?serialnum!3

[ANS thanks the Southgate ARC news site and Istanbul Technical University for the above information]

/EX

SB SAT @ AMSAT $ANS-177.05
New Horizons Mission Presents New Opportunity for Citizen Scientists

AMSAT News Service Bulletin 177.05
From AMSAT HQ SILVER SPRING, MD.
June 26, 2011
To All RADIO AMATEURS
BID: $ANS-177.05

The Zooniverse is home to the internet's largest, most popular and most successful citizen science projects. You can find all the details of their projects at http://www.zooniverse.org/

Zooniverse has added a project where Citizen Scientists help choose an additional destination or two for a spacecraft heading to the outer solar system. Ice Hunters will allow the public to help discover a potential new, icy follow-on destination for NASA's New Horizons spacecraft, which is currently en route to make the first flyby of the Pluto system. After it zooms past Pluto, the spacecraft will have the capability to explore other Kuiper Belt Objects. The destination has yet to be chosen. That's where you can help.

With Ice Hunters, the public can help scientists search through deep telescopic images for currently unknown objects in the Kuiper Belt. What's cool is that you'll be searching for Kuiper Belt Objects and potential dwarf planets in much the same way that Clyde Tombaugh found Pluto: comparing images of the same region of the Kuiper Belt and looking for objects that move or vary in brightness.

You can read all the details on-line at: http://www.icehunters.org/

[ANS thanks UniverseToday.com, Zooniverse, and Ice Hunters for the above information]

/EX

SB SAT @ AMSAT $ANS-177.06
Satellite Shorts From All Over

AMSAT News Service Bulletin 177.06
From AMSAT HQ SILVER SPRING, MD.
June 26, 2011
To All RADIO AMATEURS
BID: $ANS-177.06

+ iPhone and iPad users may be interested in the free ESA App to access top news stories, videos, images, facts and figures, ESA's Twitter feeds, Flickr and Facebook links and other information in a convenient mobile package. This is now available free of charge for iPhone and iPad directly from the App Store at Apple.

+ AMSAT-SM has a new website and is active on Facebook and Twitter. Please visit the new AMSAT-SM (Sweden) website at:
http://www.amsat.se
AMSAT-SM on Twitter: http://twitter.com/#!/amsat_sm
AMSAT-SM on Facebook:
http://www.facebook.com/pages/AMSAT-SM/196154360421894
(Lars SM0TGU)

+ UniverseToday.com posted a video from Phil Plait's Discovery Channel series "Bad Universe" showing the ways the world will end:
http://www.universetoday.com/86680/video-ways-the-world-will-end/

+ A time lapsed video from the Goddard Space Flight Center Scientific Visualization Studio, uses data from the Lunar Reconnaissance Orbiter and compresses one month into 12 seconds and one year into 2.5 minutes.

You'll see how the Moon "wobbles" in its orbit, the changes in libration, and axis tilt, the Moon's phases. Watch it at:

http://www.universetoday.com/86613/one-year-of-the-moon-in-2-5-minutes/

+ Jim List, G3WGM, Hon Sec AMSAT-UK reminds attendees to the AMSAT-UK Colloquium, Holiday Inn, Guildford, UK 29-30 July that the hotel is getting quite booked up already for the Saturday night. To avoid disappointment, we strongly urge you to book your place asap. Speak to
Rachael Cross on +44 (0) 1483 784418. More details, incl prices, at http://www.uk.amsat.org/colloquium-2011

+ Congratulations to Jim, KE4KOL, for achieving Satellite VUCC #207!

+ Congratulations also to Rodney, KC0ZHF for achieving his WAS Satellite Award!

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-177.07
ARISS Status - 20 June 2011

AMSAT News Service Bulletin 177.07
From AMSAT HQ SILVER SPRING, MD.
June 26, 2011
To All RADIO AMATEURS
BID: $ANS-177.07

1. Germany Contact to be Rescheduled

The ARISS contact that was scheduled with Hochtaunusschule in Oberursel, Hessen, Germany on Tuesday, June 14 was not successful. The ARISS team is trying to determine what happened and hopes to reschedule the contact sometime in the future.

2. Astronaut Training Status

Astronaut Mike Hopkins (Expedition 37) passed his amateur radio Technician exam on Thursday, June 9. He was issued the call sign KF5LJG.

On Monday, June 13, several astronaut candidates passed their Technician License exams and were issued the following call signs:
Takuya Onishi, KF5LKS
Gregory Wiseman, KF5LKT
Jeremy Hansen, KF5LKU
In addition, Kjell Lindgren, KO5MOS upgraded from Technician to General.

Another round of tests for the latest class of astronauts may be conducted in the near future.

A successful ARISS simulated contact was held between Kevin Ford, KF5GPP and youth from John McCrae Secondary High School, Ottawa, Canada on Monday, June 13. The training session was a terrestrial-based amateur radio contact using ARISS equivalent equipment and helped to prepare Ford for participation in ARISS contacts when he flies with Expedition 33 in September 2012.

Don Pettit, KD5MDT and Andr&#65533; Kuipers, PI9ISS are scheduled for an ARISS
preflight session on June 22. The two astronauts are part of Expedition 30 which will launch in November 2011.

3. Debrief Session Held with Expedition 26/27 Crew Members

On Wednesday, June 15 ARISS members participated in an ISS Ham debrief session with Expedition 26/27 crew members Cady Coleman and Paolo Nespoli.
The astronauts provided good feedback on the ARISS program.

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's
Club. Members of the President's Club, as sustaining donors to AMSAT Project
Funds, will be eligible to receive additional benefits. Application forms
are
available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

87. Weekly Highlights of Solar and Geomagnetic Activity, 20 - 26 June 2011

Newsgroup: rec.radio.amateur.space
Date: 2011-06-28 21:30:07 UTC
From: SWPC.Webmaster@noaa.gov
Message-ID: <20110628213001.366BF33C5F@panix2.panix.com>
Source record: 313
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.info

```
:Product: Weekly Highlights and Forecasts
:Issued: 2011 Jun 28 1707 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
# Weekly Highlights and Forecasts
#
Highlights of Solar and Geomagnetic Activity
20 - 26 June 2011

Solar activity was very low to low. Region 1236 (N17, L=167,
class/area Ehi/350 on 15 June) produced a long-duration C7/Sf at
21/0325 UTC associated with an Earth-directed full-halo coronal mass
ejection (CME). Activity was at very low levels during 22 - 26 June
with occasional B-class flares from Region 1236 as it gradually
decayed.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at
normal to moderate levels during 20 - 22 June. Fluxes increased to
normal to high levels during 23 - 24 June. A further increase to
moderate to high levels occurred on 25 - 26 June.

Geomagnetic activity was at quiet to unsettled levels during 20 - 21
June. Activity increased to quiet to active levels during 22 - 23
June, with minor to major storm periods at high latitudes, due to a
coronal hole high-speed stream (CH HSS). A CME passage (from the
halo-CME observed on 21 June) also occurred early on 23 June with a
sudden geomagnetic impulse observed at Boulder at 23/0258 UTC (22
nT). Activity decreased to quiet to unsettled levels during 24 - 26
June as CH HSS effects subsided.

Forecast of Solar and Geomagnetic Activity
29 June - 25 July 2011

Solar activity is expected to be at very low levels until 03 July
with the return of old Region 1234 (S16, L=246). Activity is then
expected to be low followed by a further increase to low with a
chance for isolated M-class activity as old Region 1236 rotates back
on the visible disk.

No proton events are expected at geosynchronous orbit.
```

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at moderate to high levels during 29 June - 01 July. A decrease to normal to moderate levels is expected during 02 - 05 July followed by an increase to moderate to high levels during 06 - 07 July due to a CH HSS. Fluxes are expected to decrease to normal to moderate levels during 08 - 19 July. Fluxes are expected to increase to moderate to high levels during 20 - 23 July following the CH HSS.

Geomagnetic field activity is expected to be at quiet to unsettled levels during 29 - 30 June. A CH HSS is expected to boost activity to quiet to active levels during 01 - 03 July. Mostly quiet levels are forecast for 03 - 07 July as the CH HSS subsides. An increase to quiet to unsettled levels is expected during 08 - 09 July as another CH HSS disturbs the field. Quiet levels are expected from 10 - 16 July. Another recurrent CH HSS is expected to become geoeffective on 17 July bringing quiet to unsettled conditions. A further increase to active levels with a chance for isolated minor storm periods at high latitudes is expected during 19 - 21 July followed by quiet to unsettled levels on 22 July as the effects from the CH HSS subside. Quiet levels are expected from 23 - 25 July.

88. Central Nebraska Near Space Program (CNNSP)

Newsgroup: rec.radio.amateur.space
Date: 2011-06-29 15:14:53 UTC
From: ARRL Members Only Web site <memberlist@www.arrl.org>
Message-ID: <20110629125208.BDB0E21E61@bmail.arrl.org>
Source record: 314
Cross-posted to: rec.radio.amateur.moderated,rec.radio.amateur.space,oma.general,nebr.misc,rec.radio.info

Before I get to the subject of this email, let me mention that I visited eight Field Day sites over the weekend. I will get some pictures posted for my next monthly report. My travels took me from Kearney to Omaha. Ham radio is doing well in Nebraska. Thanks for the fine work and team spirit at each site.

Roger Hammond, KC0MWM sent me an interesting email about the Central Nebraska Near Space Program field day balloon launch from Grand Island last Saturday (June 25). Roger has a website where he posted many ground and aerial photographs from the "CNNSP-10" flight. The balloon reached an altitude of 89,164 feet.

The URL for the website is: http://www.cnnsp.org . Click on the CNNSP-10 link.

Congratulations, Roger, to you and your group for a truly interesting event!

73, Art K0AIZ

ARRL Nebraska Section
Section Manager: Arthur I Zygielbaum, K0AIZ
k0aiz@arrl.org
---

89. Crossposting Permitted to rec.radio.amateur.moderated

Newsgroup: rec.radio.amateur.space
Date: 2011-07-01 06:00:03 UTC
From: rram@panix.com
Message-ID: <radio/ham-radio/moderated/crossposting-1-1309500001@panix.com>
Source record: 315
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.info

```
Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/moderated/crossposting
Revision: 1.1 2009/04/12 19:42:04
Posting-Frequency: posted monthly
URL: http://www.panix.com/~rram/usenet/rram/index.html

Changes followed by "|".

After a 30-day public discussion and feedback period to gauge reader
opinions in March of 2009:

http://groups.google.com/group/rec.radio.amateur.moderated/browse_thread/thread/d7d337db35
f23326

the rec.radio.amateur.moderated Moderation Team has decided to consider
amending its charter, and permit limited simultaneous crossposting to
rec.radio.amateur.moderated and one other unmoderated
amateur-radio-related discussion newsgroup. We are currently trying
this on a temporary basis (90 days, through early July 2009), and adopt
it permanently if successful.

Approved rec.radio.amateur.* newsgroups are those that are currently
listed in the latest version of the "List of Big Eight Newsgroups" which
is crossposted monthly to news.announce.newgroups, news.groups, and
news.lists.misc.

Approved alt.radio.amateur.* and alt.ham-radio.* newsgroups are those
that have been created consistent with the suggestions in "So You Want
to Create an Alt Newsgroup" at:

http://www.faqs.org/faqs/alt-creation-guide/

Approved regional hierarchy newsgroups are those that contain either
"radio.amateur" or "ham-radio" in their names, including
uk.radio.amateur and aus.radio.amateur.misc.

We will make every reasonable effort to keep our list of approved
newsgroups up-to-date. In case we have overlooked any, and a submission
is rejected in error as a result, the rejected submitter can E-mail us
at our administrative contact address (in the signature at the bottom of
this article, and the default Reply-To for the rejection message)
requesting that it be added, and that the article be approved. We may
still choose to reject articles crossposted to any alt.* newsgroup with
an inappropriate name, including obscene language, embedded
name-calling, or encouragement of unlawful conduct.
```

Please direct any comments, questions, or criticisms to
rec-radio-amateur-moderated-request@panix.com.

90. ANS-184 AMSAT News Service Weekly Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2011-07-04 14:09:39 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <001d01cc3a53$fe06b210$fa141630$@net>
Source record: 316
Cross-posted to: rec.radio.amateur.space,rec.radio.info

AMSAT NEWS SERVICE
ANS-184

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* Getting Ready for ARISSat-1/RadioSkaf-V Operation
* Call For Articles - Brief Author's Guide to the AMSAT Journal
* DX & Rare Grids
* Reminder: The DARA Matching Gift Challenge
* Satellite Shorts
* ARISS Report

SB SAT @ AMSAT $ANS-184.01
Getting Ready for ARISSat-1/RadioSkaf-V Operation

AMSAT News Service Bulletin 184.01
From AMSAT HQ SILVER SPRING, MD.
July 3, 2011
To All RADIO AMATEURS
BID: $ANS-184.01

Getting Ready for ARISSat-1/RadioSkaf-V Operation

Here are some reminders to help you get your station ready for ARISSat-1/
RadioSkaf-V operation. Your 2-meter FM radio or HT will work well to receive the FM voice messages and SSTV on the 145.950 MHz downlink.

You will need a SSB-capable receiver to copy the BPSK telemetry beacon, the CW beacons, and the linear transponder passband.

Read about the details ...

145.950 MHz FM Downlink:

FM transmissions will cycle between a voice ID as RS01S, select telemetry values, 24 international greeting messages in 15 languages and SSTV images. One of the messages will be a conversation between Yuri

Gagarin and ground control.

435 MHz - 145 MHz Linear Transponder:

The linear transponder will operate in Mode U/V (70 cm Up, 2m Down).
It is an 16 KHz wide inverting passband and the convention will be to
TX LSB on the 435 MHz uplink and RX USB on the 145 MHz downlink. This
mode is designed to work with low power transmitters and omni antenna.

145.919 MHz/145.939 MHz CW Beacon:

The CW transmissions will be callsign ID RS01S, select telemetry, and
callsigns of people actively involved with the ARISS program.

145.920 MHz SSB BPSK-1000 Telemetry:

The BPSK transmissions will feature a new 1kBPSK protocol developed by
Phil Karn, KA9Q to be readable in low signal level conditions. The BPSK
data will transmit satellite telemetry.

The ARISSat-1/RadioSkaf-V BPSK-1000 downlink is transmitted in SSB mode
on 145.920 MHz. When the CW2 beacon on 145.919 MHz is active this indi-
cates that the BPSK-1000 format is being transmitted. If the CW1 beacon
on 145.939 MHz is active this indicates the backup of BPSK-400 format
is being transmitted.

Transmitting at 100 mW, both BPSK rates include Forward Error Correction
(FEC) and it is expected that modest quarter-wave antennas with low-loss

coaxial cable will provide sufficient signal strength for decoding and
display by the ARISSatTLM software.

Download the Windows ARISSatTLM free ground station soundcard
demodulator
and display software:
http://www.arissattlm.org/download/ARISSatTLM_050_Setup.exe

Download the Mac ARISSatTLM software:
http://www.arissattlm.org/download/ARISSATTLM.zip

The ARISSatTLM software user guide is available:
http://tinyurl.com/42uhtyf (amsat.org)

Get your color ARISSat-1/RadioSkaf-V Frequency Guide:
http://tinyurl.com/4t497t2 (amsat.org)

ARISSat-1/RadioSkaf-V Presentation Slides (~1MB)
http://tinyurl.com/4n4pzkm
(amsat.org)

[ANS thanks the ARISSat-1/RadioSkaf-V Team for the above information]

/EX

SB SAT @ AMSAT $ANS-184.02
Call For Articles - Brief Author's Guide to the AMSAT Journal

AMSAT News Service Bulletin 184.02
From AMSAT HQ SILVER SPRING, MD.
July 3, 2011
To All RADIO AMATEURS
BID: $ANS-184.02

You are invited to share your amateur radio in space ideas and experiences with fellow satellite operators. The AMSAT Journal, a bi-monthly publication of AMSAT-North America, brings you the latest information in satellite mission planning, satellite- related hardware design and construction, satellite-related software design and implementation, and amateur radio earth station construction.

There are plenty of opportunities for you to share your ideas and experience across all levels. Did you homebrew a successful antenna? Which setup did you use for your first satellite contacts? A brief write-up and photos are appreciated by everyone!

Do you have ideas about future amateur radio space missions? Can you describe unique aspects of a particular orbit and the equip- ment needed

to make it work? Simply type out your ideas on your computer and send them
in. Let the AMSAT Journal editorial team do the clean up and formatting for you.

Its easy to send your article to the AMSAT Journal e-mail box via journal@amsat.org. There is no need to do any special formatting on your

submission because the final layout format is driven by the magazine's typesetting software. All you need to include is:

+ Your text in MS-Word or plain text format Graphics saved in separate
+ files (jpg, gif, tiff)

(Actually, an MS-Word file with embedded graphics is the most difficult format to typeset.)

If you have any questions, or need some help feel free to contact the editors at the AMSAT Journal at journal@amsat.org. One of us will get back to you as soon as we can.

Ed Long, WA4SWJ Editor-in-Chief
Bill Hook, W3QBC Assistant Editor

[ANS thanks the AMSAT Journal for the above information]

/EX

SB SAT @ AMSAT $ANS-184.03
DX & Rare Grids

AMSAT News Service Bulletin 184.03
From AMSAT HQ SILVER SPRING, MD.
July 3, 2011
To All RADIO AMATEURS
BID: $ANS-184.03

+ Listen for Eric W4OTN, Amanda KI4IWS, Robin WA4WPD, Bill KG4CXY on July 29 to August 1 as they activate N4I from Core Banks Barrier Island (IOTA NA-067, USi NC033S, WLOTA 0596), Pamlico County, North Carolina. They will participate in the RSGB IOTA Contest. Outside of the contest they plan to be active 80-10m CW and SSB. Operation on 6m and satellites is being planned as well. QSL W4OTN via the bureau or direct at the address on QRZ.com. (rsgbiota.org)

+ Paul, 2E1EUB will be operating mobile on AO-7 and other satellites from the Islands of Harris and Lewis, off the west coast of Scotland for about 2 weeks between July 2-11. During this trip Paul will also be mobile in northern Scotland and the Island of Skye. He will also post information on his QRZ.com callsign lookup for 2E1EUB.

[ANS thanks Eric, Amanda, Robin, Bill & Paul for the above information]

/EX

SB SAT @ AMSAT $ANS-184.04
Reminder: The DARA Matching Gift Challenge

AMSAT News Service Bulletin 184.04
From AMSAT HQ SILVER SPRING, MD.
July 3, 2011
To All RADIO AMATEURS
BID: $ANS-184.04

The Dayton Amateur Radio Association (DARA) has announced a fund raising challenge for AMSAT whereby they will match on a 1:3 basis up to $5,000.00 for donations made in 2011. That is, for every $3.00 that AMSAT raises, DARA will provide $1.00 up to amaximum of $5,000 donated by DARA.

AMSAT kicked off the fundraising campaign at the Hamvention, where donations began count against this goal. Please consider making a donation to AMSAT at Hamvention or anytime this Spring as we strive to meet this goal.

We appreciate DARA's support for AMSAT and see this as an opportunity for donors to increase the impact of their donations by taking advantage of this matching program.

[ANS thanks AMSAT Headquarters for the above information]

/EX

SB SAT @ AMSAT $ANS-184.05
Satellite Shorts From All Over

AMSAT News Service Bulletin 184.05
From AMSAT HQ SILVER SPRING, MD.
July 3, 2011
To All RADIO AMATEURS
BID: $ANS-184.05

+ The dates for the July Hudson Valley Satcom net are July 7
and July 21 at 8:00 PM Eastern Daylight Time (UTC - 4).
You can tune in via the 146.970 MHz Mt. Beacon repeater,
PL 100.0 or via EchoLink on the N2EYH-L node. More info
is available at: www.hvsatcom.org (Stu, WA2BSS)

+ NASA Jet Propulsion Laboratory posted an 11-minute animation
depicting key events of NASA's Mars Science Laboratory mission,
which will launch in late 2011 and land a rover, Curiosity, on
Mars in August 2012. Watch on-line at:
http://tinyurl.com/6bx2g3r (nasa.gov)

+ AMSAT can be found on Facebook at:
http://www.facebook.com/home.php?sk=group_7828379515

+ Luis, LU6QI continues to enjoy success with the fine art and
science of stretching the AO-7 footprint. He reports DX con-
tacts with Louis, KD5GM on CW on AO7 Mode B, June 22 for a
distance of 7631 km. Luis had a DX contact with Allen, N5AFV,
on June 24 via CW on AO7 Mode B for a distance of 7644 km.

+ Nader ST2NH appeared on Ashorooq TV to describe the University of
Khartoum Cubesat project - KN-Sat1. The 11 minute interview was in
Arabic and can be seen on the Southgate ARC News Website at:
http://tinyurl.com/66lab38 (Southgate)

+ John, K8YSE posted Field Day recordings for AO-51, AO-27 and SO-50
on his website: http://www.papays.com/sat

+ AMSAT has received the sad news of the death of Leanore Guimont,
KA6UCD, the wife of Dave, WB6LLO. For many years no Symposium
would be complete without the Dave and Leanore "jewelry" contest.
Our thoughts and prayers go out to Dave. He has requested no cards
or email be sent.

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-184.06
ARISS Status - 27 June 2011

AMSAT News Service Bulletin 184.06
From AMSAT HQ SILVER SPRING, MD.
July 3, 2011
To All RADIO AMATEURS
BID: $ANS-184.06

Amateur Radio on the International Space Station (ARISS) Status Report June 27, 2011

1. Japanese Contact Successful

On Tuesday, June 21, an Amateur Radio on the International Space Station (ARISS) contact was held between Nankan 4th Elementary School in Tamanagun, Kumamoto, Japan and on-orbit astronaut Satoshi Furukawa, KE5DAW. There was a delay in making contact, but once established, the students got in nine questions. This unique activity supplemented lesson plans about amateur radio technology and the International Space Station

mission. An audience of approximately 100 attended the event which was covered by 5 newspapers and 5 television stations, including NHK (Japan Broadcasting Corporation).

2. ARISS International Team Teleconference Held

The monthly ARISS International Team meeting was held on Tuesday, June 21. Topics covered included the upcoming ARISS Face to Face meeting

in October and a status on the ARISSat-1 satellite, designated KEDR in Russia. Minutes have been posted:
https://www.rac.ca/ariss/arisstel2011-06-21.htm

3. News of U.S. ARISS Proposal Process Distributed

The NASA EXPRESS message sent on June 16 included an item on ARISS contact opportunities for U.S. schools using the new proposal process. Also made aware of these opportunities were other U.S. education organizations such as Solar System Ambassadors, Space Grant Community, INSPIRE, WISH, Endeavor Fellows and the Museum Alliance.

4. Astronaut Training Status

Don Pettit, KD5MDT, and Andr&#xfffd; Kuipers, PI9ISS, were given an ARISS pre-
flight session on June 22. The two astronauts hope to participate in ARISS contacts during their flight with Expedition 30 which will launch in November 2011.

5. ARISS Items in ARRL Letter

The American Radio Relay League (ARRL) ran two ARISS items in its June 23 ARRL Letter. The first story is about the astronauts who recently passed their amateur radio Technician exams and were issued call signs. This piece is titled "NASA Astronauts and Astronaut Candidates Earn Amateur Radio Licenses." The second item is titled "Field Day from Space: International Space Station Could be Active for ARRL Field Day." Both stories may be viewed at:
http://www.arrl.org/arrlletter?issue 11-06-23

6. AMSAT Covers ARISS Proposal

The AMSAT (Radio Amateur Satellite Corporation) News Service June 26 bulletin (ANS-177) included another announcement about the new ARISS proposal process for U.S. schools. "July 15 Deadline to File ARISS Contact Proposals" may be found here:
http://amsat.org/pipermail/ans/2011/000526.html

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Dee Interdonato, NB2F

91. ONLY FOR MEN`

Newsgroup: rec.radio.amateur.space
Date: 2011-07-04 17:21:53 UTC
From: devi <satyamsivam9030@gmail.com>
Message-ID: <49349bf3-29c7-496c-8e1b-b2e389775436@h25g2000prf.googlegroups.com>
Source record: 317

FOR FAST UPDATED IN TELUGU FILM INDUSTRY
http://allyouwants.blogspot.com/
PRIYAMANI SPICY PHOTOS IN COW GIRL
http://allyouwants.blogspot.com/2011/02/priyamani-spicy-photo-shoot-cow-girl.html
KAJAL HOT PHOTOS IN SAREE
http://allyouwants.blogspot.com/2011/06/kajal-very-spice-pics.html
TAPSEE SISTER HOT STILLS FOR U
http://allyouwants.blogspot.com/2011/06/tapsee-sister-shagun-pannu-hot-photo.html
NAMITHA LATEST HOT PHOTO STILLS
http://allyouwants.blogspot.com/2011/06/namithas-latest-stills-from-her.html
trisha in pothys ad stills exclusive for u
http://allyouwants.blogspot.com/2010/12/trisha-in-pothys-ad-stills.html
NIKITHA HOT PHOTO STILLS
http://allyouwants.blogspot.com/2011/01/nikitha-hot-stills-in-blue-saree.html

FOR GOOD JOBS SITES TO YOU
http://goodjobssites.blogspot.com/

FOR HOT PHOTO&VIDEOS
KATRINA KAIF IN BEAUTIFUL RED DRESS
http://southactresstou.blogspot.com/2011/05/katrina-kaif_22.html
GOOD LOOKING DEEPIKA PADUKONE
http://southactresstou.blogspot.com/2011/05/deepika-padukone_22.html

92. WSR-186 AMSAT Weekly Satellite Report

Newsgroup: rec.radio.amateur.space
Date: 2011-07-05 16:38:33 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <003301cc3b31$e89c1080$b9d43180$@net>
Source record: 318
Cross-posted to: rec.radio.amateur.space,rec.radio.info

```
This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-186.S1
WSR 186 Part 1 07/05/2011

AMSAT NEWS SERVICE BULLETIN 186.S1
FROM AMSAT HQ SILVER SPRING, MD, July 05, 2011
TO ALL RADIO AMATEURS
BID: $WSR-186.S1

HO-68 HOPE-1 (CAS-1)(XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009 0231z
Launch site: Taiyuan Space Center, PRC

Status: By schedule

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
145.9250 - 145.9750 MHz SSB/CW
145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
435.7650 - 435.7150 MHz SSB/CW
435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=108

For more information about XW-1 (CAS-1):
http://
[02092011]
=====
SO-67 SumbandilaSat
```

Catalog Number: 35870
Launch Date: September 17, 2009 1555z
Launch site: Baikonur, Kazakhstan

Status: By schedule

Callsign: ZS0SUM

Uplink: 145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=88
[02092011]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=68
[02092011]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05, 2005 0444z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.9360 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=30

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[02092011]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004 0745z
Launch site: Baikonur, Kazakhstan

Status: Semi-operational - IHU crash each eclipse

Current Mode(s):
Voice repeater: V/u
Uplink: 145.880 MHz FM
Downlink: 435.150 MHz FM

Telemetry: Recovery efforts
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.880 MHz FM
145.920 MHz FM
145.920 MHz FM - 67 Hz PL tone burst
1268.705 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.703 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear

U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=19
[06162011]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002 1700z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4
Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the re-
peater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
the 10 minute timer.
[02092011]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
145.870 MHz FM
145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[06232011]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993 0140z
Launch site: Kourou, French Guiana

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[02092011]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974
Launch site: Vandenberg AFB, California, USA

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
145.972 MHz CW
435.100 MHz CW
2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02092011]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
Kourou, French Guiana
Uchinoura Space Center, Japan
Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - OFF
APRS - OFF
SSTV - OFF

Expedition 28 Crew (May - September 2011):
Commander: Andrey Borisenko
Flight Engineer: Ron Garan KF5GPO
Flight Engineer: Alexander Samokutyaev
Flight Engineer: Satoshi Furukawa
Flight Engineer: Sergey Volkov KE5DAW
Flight Engineer: Micheal Fossum KF5AQG

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM

145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[06162011]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-186.S2
WSR 186 Part 2 07/05/2011

AMSAT NEWS SERVICE BULLETIN 186.S2
FROM AMSAT HQ SILVER SPRING, MD, July 05, 2011
TO ALL RADIO AMATEURS
BID: $WSR-186.S2

O/OREOS
Catalog Number: 37224
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.035 MHZ AX.25

Beacon:

Callsign:

URL: http://www.ooreos.org/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=146
[02092011]
=====
Rax-1 Radio Aurora Explorer
Catalog Number: 37223
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.505 MHz 9k6 GMSK

Beacon:

Callsign: RAX-1

URL: http://rax.engin.umich.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=165
[02092011]
=====
FO-69 Fastrac-1 Sara Lily
Catalog Number: 37227
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Operational

Uplink 1: 145.980 MHz 1k2 baud
Uplink 2: 145.825 MHz 1k2 baud
Downlink: 437.345 MHz 1k2 and 8k6 baud

Beacon: 437.435 MHz 1k2 AX.25

Callsign: Fast1

URL: http://fastrac.ae.utexas.edu/index.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=83
[07052011]
=====
FO-70 Fastrac-2 Emma
Catalog Number: 37380
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Operational

Uplink 1: 435.025 MHz 1k2 baud
Uplink 2: 437.435 MHz 9k6 baud
Downlink: 145.825 MHz

Beacon: 145.825 MHz 1k2 AX.25

Callsign: Fast2

URL: http://fastrac.ae.utexas.edu/index.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=84
[07052011]
=====
StudSat
Catalog Number: 36796
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink: 437.505MHz, 9600bps FSK
Downlink: 437.505MHz, 9600bps FSK
Beacon : 437.505MHz, 20bps ASK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=164
[02092011]
=====
TIsat-1
Catalog Number: 36799
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On orbit

Callsign: HB9DE

Uplink: 145.980MHz FM, AFSK
Downlink: 437.305MHz FM, AFSK
Beacon: 437.305MHz CW

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=118
[02092011]
=====
HO-68 HOPE-1 (CAS-1)(XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009 0231z
Launch site: Taiyuan Space Center, PRC

Status: By schedule

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
145.9250 - 145.9750 MHz SSB/CW

145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
435.7650 - 435.7150 MHz SSB/CW
435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

IARU coordination page:
http://www.amsat.org.uk/iaru/formal_detail.asp?serial=108

For more information about XW-1 (CAS-1):
http://

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=108
[02092011]
=====
SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w): 437.5050MHz FSK 1k2bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=109
[02092011]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
437.3850 MHz FSK 9k6bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=110
[02092011]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=113
[02092011]
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
Beacon(500mw): 436.000MHz GMSK 9k6bp
[02092011]
=====
CP-6
Catalog Number: 35003
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: Operational

Downlink: 437.365 MHz 1k2 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=121
[02092011]
=====
HAWKSAT 1
Catalog number: 35004
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: operational

Downlink: 437.345 MHz ?

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=105
[02092011]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: Operational

Downlink: 437.465 MHz 1k2 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=94
[02092011]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009 0115z
Launch Site: Satish Dhawan Space Centre, India

Status: ?

Downlink: 435.000 MHz
Uplink: 145.800 MHz

Telemetry: 137.400 MHz
[02092011]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon: 437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=101
[02092011]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: In Orbit

Downlink: 437.375 MHZ FSK9k6/CW
Beacon: 437.375 MHz FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[02092011]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
437.465 MHz FM/CW
Beacons: 437.305 MHz FM/CW
437.275 MHz FM/CW

Callsigns: JR5YBN
JR5YBO

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[02092011]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Downlink: 437.455 MHz AFSK/CW
Beacon: 437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[20092011]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon: 437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php

[02092011]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008 1520z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Curent Modes: Telemetry
Audio
Images

Downlinks: 435.315 MHz
435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02092011]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web
page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=46
[02092011]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=60
[02092011]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational ?

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL
=/satellites/status.php
[07052011]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Current Mode: dependant on last received command

Uplink: 145.980 MHz FM
Downlink: 437.275 Mhz CW
437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[06162011]
=====

CO-66 Seeds II
Catalog number:
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web
page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL
=/satellites/status.php
[02092011]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=72
[02092011]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=74
[02092011]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005 0652z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=37
[02092011]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: ?????

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[02092011]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004 0745z
Launch site: Baikonur, Kazakhstan

Status: Semi-operational - IHU crash each eclipse

Current Mode(s):
Voice repeater: V/u
Uplink: 145.880 MHz FM
Downlink: 435.150 MHz FM

Telemetry: Recovery efforts
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.880 MHz FM
145.920 MHz FM
145.920 MHz FM - 67 Hz PL tone burst
1268.700 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.708 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=19
[06162011]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[02252011]
=====
CO-55 Cute-1.7+APD II
Catalog Number: 27844
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Current Mode: CW downlink worldwide
AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=78
[02092011]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001 0240z
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[02092011]
=====
RS-22 RADIO SPORT 22 (MOZHAYETS 4)
Catalog number: 27939
Launch Date: September 27, 2003 0612z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02092011]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990
Launch site: Kourou, French Guiana

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
145.860 MHz 1200-baud Manchester FSK
145.880 MHz 1200-baud Manchester FSK
145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[02092011]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984
Launch site: Vandenburg AFB, California, USA

Status: Operational ?

Current Mode: /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz
Mode-S Beacon: 2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[07052011]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)

Launch sites: Baikonur, Kazakhstan
Kourou, French Guiana
Uchinoura Space Center, Japan
Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - OFF
APRS - OFF
SSTV - OFF

Expedition 28 Crew (May - September 2011):
Commander: Andrey Borisenko
Flight Engineer: Ron Garan KF5GPO
Flight Engineer: Alexander Samokutyaev
Flight Engineer: Satoshi Furukawa
Flight Engineer: Sergey Volkov KE5DAW
Flight Engineer: Micheal Fossum KF5AQG

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[06162011]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-186.S3
WSR 186 Part 3 07/05/2011

AMSAT NEWS SERVICE BULLETIN 186.S3
FROM AMSAT HQ SILVER SPRING, MD, July 05, 2011
TO ALL RADIO AMATEURS
BID: $WSR-186.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NANOSAIL-D
Catalog Number:
Ejection Date: January 17, 2011

Status: On orbit

Downlink: 437.270 MHz AX.25

URL: http://nanosaild.engr.scu.edu/dashboard.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=115
[01272011]
=====
CP4
Catalog Number: 31132
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=79
[09062010]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=76
[09062010]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=51
[09062010]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.250

Official Website: http://www.ncube.no

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=24
[09062010]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink 2401.835 MHz 38k4 packet

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=54
[09062010]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=53
[09062010]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks: 145.850 MHz
145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====

SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks

V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON General Beacon(GB) Middle Beacon(MB) Engineering Beacon(EB)
2 m none 145.898 MHz none
70cm 435.438 MHz 435.588 MHz 435.838 MHz
13cm(1) 2400.188 MHz 2400.338 MHz 2400.588 MHz
13cm(2) 2401.173 MHz 2401.323 MHz 2401.573 MHz
3cm 10450.975 MHz 10451.125 MHz 10451.375 MHz
1.5cm 24047.885 MHz 24048.035 MHz 24048.285 MHz
[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
145.890 FM
145.930 FM
1269.700 FM
1269.800 FM
1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[07172010]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink: 435.1380 MHz AFSK 1200 BPS
Downlink: 435.2060 MHz AFSK 1200 BPS
Uplink: 145.8150 MHz AFSK 1200 BPS
Uplink: 145.8350 MHz AFSK 1200 BPS
Uplink: 145.8550 MHz AFSK 1200 BPS
Uplink: 145.8750 MHz AFSK 1200 BPS
[06042009]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks: 145.875 MHz FM 1200-baud
145.900 MHz FM 1200-baud
145.925 MHz FM 1200-baud
145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink: 435.0625 MHz FM 1k2bps AFSK
435.1125 MHz FM 1k2bps AFSK
435.1375 MHz FM 1k2bps AFSK
Downlink: 145.9750 MHz FM 1k2bps AFSK
2446.5025 MHz FM 1k2bps AFSK

Beacon: 2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink: 435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons: 435.795 MHz CW
435.910 MHz AX25

Voice Transponder:
Uplink: 145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks: 145.850 MHz
145.870 MHz
145.890 MHz
145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode: V/u

Uplink: 145.900 MHz FM 1200-baud Manchester FSK (reserved)
145.920 MHz FM VOICE
145.940 MHz FM 1200-baud Manchester FSK (reserved)
145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink: 437.026 MHz USB VOICE
(1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink: 145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink: 145.8500 MHz MFSK 1200 BPS
Uplink: 145.8700 MHz MFSK 1200 BPS
Uplink: 145.8900 MHz MFSK 1200 BPS
Uplink: 145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.8500 - 145.9000 MHz SSB/CW
Downlink 29.4000 - 29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink: 29.4500 - 29.5500 MHz SSB/CW

Beacons: 29.450 MHz
435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink: 145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB

Beacon 1: 29.352 MHz (intermittent)
Beacon 2: 29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12

Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-186.S4
WSR 186 Part 4 07/05/2011

AMSAT NEWS SERVICE BULLETIN 186.S4
FROM AMSAT HQ SILVER SPRING, MD, July 05, 2011
TO ALL RADIO AMATEURS
BID: $WSR-186.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Re-entered
Re-entered: October 25, 2009

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=56
[09062010]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 437.325 MHz 9k6 GMSK
437.325 MHz CW 20wpm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=117
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 436.250 MHz 9k6 FHSS
[11112009]
=====
Pollux
Catalog Number: 35693
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=139
[09062010]
=====
Castor (ANDE-2)
Catalog Number: 35694
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=144
[09062010]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=59
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Re-Entered
Re-entered date: August 8, 2010

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[08082010]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at} amsat.org
NNNN
/EX

93. Weekly Highlights of Solar and Geomagnetic Activity, 27 June - 03 July 2011

Newsgroup: rec.radio.amateur.space
Date: 2011-07-05 21:30:09 UTC
From: SWPC.Webmaster@noaa.gov
Message-ID: <20110705213001.8F19333C4A@panix2.panix.com>
Source record: 319
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.info

```
:Product: Weekly Highlights and Forecasts
:Issued: 2011 Jul 05 1804 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
# Weekly Highlights and Forecasts
#
Highlights of Solar and Geomagnetic Activity
27 June - 03 July 2011

Solar activity was very low for 27 June to 02 July and increased to
low levels for 03 July. Region 1236 (N17, L=167, class/area Ehi/350
on 15 June), which rotated around west limb on 26 June, produced
most of the activity on 27-28 June. Regions 1242 (N17, L=056,
class/area Dso/90 on 29 June), 1243 (N16, L=351, class/area Cao/80
on 02 July), and 1244 (N16, L=024, class/area Dso/60 on 03 July)
dominated activity for 29 June - 02 July with occasional B-class
flares. Region 1244 became the dominant flare producing region on 03
July with a C2/Sf at 1244 UTC. The region also produced a long
duration B9/Sf at 03/0024 UTC which was associated with type II and
type IV radio sweeps as well as a partial halo CME centered over the
southwest limb.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at
high levels for 27-30 June but dropped to background levels for
01-03 July.

Geomagnetic field activity was predominantly quiet for 27-30 June.
Quiet to active levels were observed on 01 July due to a high speed
stream from a coronal hole. Quiet to unsettled levels prevailed for
02-03 July with some isolated active periods at high latitudes as
the high speed stream slowly subsided. The high speed stream was
weak with peak velocity around 450 km/s; enhanced activity intervals
corresponded to somewhat enhanced negative Bz intervals (e.g. around
-5 to -7 nT late in the day on 30 June and early in the day on 03
July).

Forecast of Solar and Geomagnetic Activity
06 July - 01 August 2011

Solar activity is expected to be very low to low for most of the
outlook interval. There may be an increase in background levels for
```

10-21 July with the return of old Region 1236 on 10 July which may also increase activity to low levels. There is a chance that new, rapidly emerging flux regions could increase activity to moderate levels at any time during the outlook period.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at background levels initially. An increase to high levels is expected around 20 July and lasting through 26 July in response to a recurrent high speed stream. Background levels are expected to return for 26 July - 01 August.

Geomagnetic field activity is expected to be quiet to unsettled for 6-8 July. Quiet levels are expected for 09-19 July. An increase to unsettled with a chance for active periods is expected for 18-21 July in response to a recurrent high speed stream. Quiet levels are expected to prevail for 24 July - 28 July. Another increase to unsettled levels is expected for 29-30 July due to another recurrent high speed stream, with quiet levels returning for 31 July - 01 August.

94. Radio Meteor Obs. Bull. June 2011 daytime Arietids

Newsgroup: rec.radio.amateur.space
Date: 2011-07-07 19:01:11 UTC
From: Chris Steyaert <observations@rmob.org>
Message-ID: <kh0c175s0d4q2mgden58b57curhnptosam@4ax.com>
Source record: 320
Cross-posted to: rec.radio.amateur.space,sci.astro.amateur

Radio Meteor Observation Bulletin No. 215 of June 2011 (94 K) is available now as

http://www.rmob.org/rmobtext/rmob1106.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

Chris

95. ANS-191 AMSAT News Service Weekly Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2011-07-10 01:13:50 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <000101cc3e9e$9ba2e2c0$d2e8a840$@net>
Source record: 321
Cross-posted to: rec.radio.amateur.space,rec.radio.info

AMSAT NEWS SERVICE
ANS-191

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* ARISSat-1/KEDR Deployment Timeline Driven by ISS Schedules
* AO-51 Operations Update
* AMSAT Awards
* Satellite Beginners Workshop Planned For AMSAT-UK 2011 Colloquium
* Satellite Shorts From All Over
* More University Satellite Missions in Preparation

SB SAT @ AMSAT $ANS-191.01
ARISSat-1/KEDR Deployment Timeline Driven by ISS Schedules

AMSAT News Service Bulletin 191.01
>From AMSAT HQ SILVER SPRING, MD.
July 10, 2011
To All RADIO AMATEURS
BID: $ANS-191.01

ARISSat-1/KEDR Project Manager Gould Smith, WA4SXM provided the latest deployment information to the AMSAT News Service. Gould said he and ARISS Hardware Engineer Lou McFadin, W5DID partici-pated in a teleconference call this week with NASA to review the Roscosmos EVA procedures for the release of ARISSat-1/KEDR during Russian EVA 29.

Gould says the preparation procedures include the battery being charged and assembled into the satellite. Also discussed were the procedures to remove the protective quilts from the solar cells and turning on the safety switches prior to deployment.

As to the date of deployment, Gould summarized, "The deployment date for ARISSat is still soft, a major factor is the shuttle launch. As of July 6 the EVA date is in early August, but the shuttle launch and docking are driving the timeline. During our discussion it was

noted that the ARISSat/KEDR deployment is the first task of the EVA, so it will occur fairly soon after the EVA begins. Since we have no firm date or time for the EVA we cannot predict where the satellite will be heard first. We will let everyone know more as we know more."

[ANS thanks ARISSat-1/KEDR Project Manager Gould Smith, WA4SXM for the above information]

/EX

SB SAT @ AMSAT $ANS-191.02
AO-51 Operations Update

AMSAT News Service Bulletin 191.02
>From AMSAT HQ SILVER SPRING, MD.
July 10, 2011
To All RADIO AMATEURS
BID: $ANS-191.02

AMSAT Vice-President of Operations Drew Glasbrenner, KO4MA, provided the latest details in AMSAT's work to keep AO-51 operational for as long as possible.

Drew wrote, "Keeping AO-51 operating requires the US command team routinely restarting the satellite, and tweaking the power settings to find a combination of operating parameters to get it through eclipse. Currently one of the 6 battery cells onboard is shorted, and another is in really poor shape."

Continuing, Drew explains, "The onboard computer was crashing each orbit because of low voltage when the solar cells were no longer receiving illumination and the satellite relies entirely on its internal battery power. Through experimentation the Command Team seems to have found a balance point where it will sometimes go up to two days before crashing."

Each time the computer crashes the Command Team has to restart it using the housekeeping software onboard in ROM. The firmware code has a limited functionality compared to the normal flight software which we would upload from the ground over a few days time. However the eclipses and battery problem were causing a crash before the upload can complete.

Drew concludes, "With lots of luck we will be able to continue to limp along. How long is anyone's guess. I'd encourage you to use AO-51 while it's available, and to financially support new satellite programs like Kiwisat, Funcube, and Fox when you can."

Uplink: 145.880 MHz, no tone.
Downlink: 435.150 MHz
The repeater is open to all when the satellite is operational.

Keep up with the latest AO-51 Control Team News on-line at:
http://www.amsat.org/amsat-new/echo/CTNews.php

[ANS thanks AMSAT-NA VP Operations Drew Glasbrenner, KO4MA for the above information]

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SB SAT @ AMSAT $ANS-191.03
AMSAT Awards

AMSAT News Service Bulletin 191.03
>From AMSAT HQ SILVER SPRING, MD.
July 10, 2011
To All RADIO AMATEURS
BID: $ANS-191.03

AMSAT Director Contests and Awards, Bruce Paige, KK5DO says that congratulations are in order for these satellite operators for having earned these operating awards:

The following have entered into the Satellite Communicators Club for making their first satellite QSO:
+ Robert Sheskin, N3PPH

The following have earned the AMSAT Communications Achievement Award:
+ Claudio Ferrari, IK1YRC #537
+ Berufliches Schulzentrum Elektrotechnik Dresden, DL0IKT (club station) #538
+ Mark Korroch, WB8TGY #539

The following have earned the AMSAT Sexagesimal Award:
+ Mark Korroch, WB8TGY #161

The following have earned the South Africa Satellite Communications Achievement award:
+ Berufliches Schulzentrum Elektrotechnik Dresden, DL0IKT (club station) #US167
+ Mark Korroch, WB8TGY #US168

The following earned upgrades to their basic Robert W. Barbee Jr., W4AMI Award:
+ Gail McDaniel, KB0RZD 2K, 3K, 4K

The following have earned their Robert W. Barbee Jr., W4AMI 5000 Award:
+ Gail McDaniel, KB0RZD #28

To see all the awards visit http://www.amsat.org.

Bruce also reminds you that mere hours remain before the deadline to send in your satellite Field Day results. The Satellite Summary Sheet (on pages 3-4 of the AMSAT Field Rules) should be used for submission of the AMSAT Field Day competition.

The Rules and the Satellite Summary Sheet can be downloaded from links at http://www.amsat.org or http://www.amsatnet.com

http://tinyurl.com/3eztlaf (amsat.org)
http://www.amsatnet.com/2011fd.doc
http://www.amsatnet.com/2011fd.pdf

Your entry must be received by KK5DO (email or postal mail) by 11:59 P.M. CDT, Monday, July 11, 2011. The preferred method for submitting your log is via e-mail to kk5do@amsat.org or kk5do@arrl.net.

You will receive an email back (within one or two days) from Bruce when he receives your email submission. If you do not receive a confirmation message, try sending it again or send it to his other email address.

Certificates will be awarded to the first-place emergency power/ portable station at the AMSAT General Meeting and Space Symposium in November 2011. Certificates will also be awarded to the second and third place portable/emergency operation in addition to the first-place home station running on emergency power. Stations submitting high, award-winning scores will be requested to send in dupe sheets for analog contacts and message listings for digital downloads.

[ANS thanks AMSAT Director of Awards and Contests, Bruce Paige, KK5DO for the above information]

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SB SAT @ AMSAT $ANS-191.04
Satellite Beginners Workshop Planned For AMSAT-UK 2011 Colloquium

AMSAT News Service Bulletin 191.04
>From AMSAT HQ SILVER SPRING, MD.
July 10, 2011
To All RADIO AMATEURS
BID: $ANS-191.04

AMSAT-UK will be holding a Satellite Beginner's Workshop at 4pm on Friday afternoon, July 29, to teach newcomers how to get started in the fascinating world of Amateur Radio Space communications.

With some satellites you can communicate using little more than a standard dual-band FM handheld. Others use SSB or CW and permit intercontinental DX communications using the VHF/UHF bands.

The Beginners Workshop will be run by Dave G4DPZ and Carlos G0AKI and takes place at the Holiday Inn, Guildford, GU2 7XZ. Look for the RSGB GB4FUN vehicle in the car park.

The AMSAT-UK International Space Colloquium takes place Saturday/Sunday, July 30/31, details at:
http://www.uk.amsat.org/

Don't forget your camera ...

AMSAT-UK has just launched a new look website http://www.uk.amsat.org/

As part of this new look, we have embarked on a new photo gallery,
so if you have any photos related to AMSAT-UK, feel free to upload
to our new Gallery, which can be found here:
http://www.uk.amsat.org/Gallery3/

[ANS thanks AMSAT-UK for the above information]

/EX

SB SAT @ AMSAT $ANS-191.05
Satellite Shorts From All Over

AMSAT News Service Bulletin 191.05
>From AMSAT HQ SILVER SPRING, MD.
July 10, 2011
To All RADIO AMATEURS
BID: $ANS-191.05

+ SO-67 has returned to operation after recovery from a cosmic ray
upset. Operation over North America has already taken place be-
tween July 7-10. Operation over Europe is planned for July 11-17.
Operation over Australia, New Zealand, Japan is planned for
July 18-31. The latest details are posted at:
http://www.amsatsa.org.za/

+ You can turn your smartphone into an ISS visible pass predictor
with the iPhone and Android aps available at:
http://simpleflybys.com .
Web based predictions are also available using the Simple Satellite
Tracker at http://spaceweather.com/flybys .

+ UniverseToday has an interesting news item today about United Launch
Alliance's launch complex. Take a tour starting at:
http://www.universetoday.com/87156/launch-complex-37b-level-by-level/

+ Goddard Space Flight Center has released a video (with sound) so
you can experience first-hand a ride aboard a sounding rocket.
Hold on to your tummy and watch at: http://tinyurl.com/3ptsgrh
(UniverseToday)

+ Giving practical definition to the informal Q-signal "QLF? - Are you
you sending with your left foot?" the Giant Morse Key constructed by
2E0DIT will reappear at ASTROFAIR 2011 Sidmouth, Devon on August 6.
For more info see:
http://projects.exeter.ac.uk/nlo/Astronomy_Fair~EN.php
Watch the video at Southgate - http://tinyurl.com/68dase2 to see if
your shoe size measures up.

+ UniverseToday posted photos and video of the testing and integration
of NASA's Orion Multi Purpose Crew Vehicle:
http://tinyurl.com/6zm4wn8

+ A photo gallery of the Minotaur rocket launch from the Virginia coast
is posted at: http://www.spaceflightnow.com/minotaur/ors1/launch/

+ Congratulations to Jeff, WB3JFS for earning his VUCC Satellite
Award #217!

+ Stefan HB9ZEM has released a video showing his prototype Amateur Radio
satellite Azimuth/Elevation tracker. See:
http://www.southgatearc.org/news/july2011/satellite_tracker_video.htm

+ See what you missed at Friedrichshafen:
http://www.southgatearc.org/news/july2011/friedrichshafen_video.htm

+ The 2nd Issue of The Egyptian Radio Amateur Magazine "CQ EGYPT"
JULY 2011 is at: http://erasd.net/CQSUAMATEURRADIOMAGAZIN.aspx

[ANS thanks everyone for the above information]

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SB SAT @ AMSAT $ANS-191.06
More University Satellite Missions in Preparation

AMSAT News Service Bulletin 191.06
>From AMSAT HQ SILVER SPRING, MD.
July 10, 2011
To All RADIO AMATEURS
BID: $ANS-191.06

Italian EduSAT Launch July 21

EduSAT is funded and coordinated by Italian Space Agency with
the aim to promote space education among high school students
and to support the qualification and scientific careers of young
people, as university students, PhD students and young researchers.
Another target of this program is to develop a small space mission
for low cost scientific experiments and technological tests in
orbit.

Edusat is currently slated to launch on a Russian Dnepr-1 on July 21.
It is planned that Eduasat will deploy the MyPocketQubs, the two
Eagle payloads and the ScoutQub sometime after launch. Its downlink
will operate under an Italian Telecommunications Ministry experimental
licence on 435.750 MHz.

The Group of Astrodynamics of the "Sapienza" University of Roma
(GAUSS) web page is at: http://tinyurl.com/6kov8ow

UNM's Trailblazer CubeSat Planned Launch March 2012

The Configurable Space Microsystems Innovations and Applications
Center (Cosmiac) of The University of New Mexico has received notice
from NASA that UNM's Trailblazer satellite has been manifested on
the Educational Launch of Nanosatellites (ELaNa) IV Mission on a
Falcon 9 rocket. This satellite will provide a proof of concept flight
for an Air Force Sponsored bus design called Space Plug-and-play Arch-
itecture (SPA). The PnP type architecture is a capability that will
allow for rapid satellite development and delivery similar to what

is currently available in a home computer. The payload includes a variety of space weather projects including a dosimeter, gyro and magnetometer. Plans call for a 325km circular orbit with a 51.6 degree inclination. The IARU has coordinated a downlink frequency of 437.425 MHz.

Watch as Craig Kief, KE5VSH, deputy director of the Configurable Space Microsystems Innovations and Applications Center (COSMIAC) discusses the mission at: http://tinyurl.com/43ps2h2 (Southgate)

[ANS thanks the CubeSat Teams at GAUSS and UNM COSMIAC for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office. And with that please keep in mind the ham who took up playing golf. He brought his XYL with him to the links but after a short while he had to tell her she asked too many questions. The XYL replied, "But I just asked why did you hit that ball into the lake?"

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

96. Weekly Highlights of Solar and Geomagnetic Activity, 04 - 10 July 2011

Newsgroup: rec.radio.amateur.space
Date: 2011-07-12 21:30:14 UTC
From: SWPC.Webmaster@noaa.gov
Message-ID: <20110712213001.DEE6233C46@panix2.panix.com>
Source record: 322
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.info

```
:Product: Weekly Highlights and Forecasts
:Issued: 2011 Jul 12 1959 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
# Weekly Highlights and Forecasts
#
Highlights of Solar and Geomagnetic Activity
04 - 10 July 2011

Solar activity was at very low to low levels during the period.
Solar activity began at very low levels through 06 July. On 06 July,
a 23 degree long filament, centered near N25W60, was observed
lifting off. An associated CME (573 km/s plane-of-sky speed) was
observed, but was not Earth-directed. Low levels returned on 07 July
when Region 1243 (N15, L=353, class/area Dai/100 on 06 July)
produced a C1/Sf at 07/0242 UTC. Four C-class flares were observed
on 08 July, the largest a C3/1n at 08/1331 UTC from Region 1247
(S18, L=269, class/area Dai/040 on 10 July). There was a long
duration B4 x-ray event at 09/0028Z UTC from Region 1247. Associated
with this event was a filament eruption located near Region 1247
that produced an asymmetric, partial-halo CME first visible on LASCO
C2 imagery at 09/0125 UTC. Activity returned to very low levels for
the remainder of the period.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at
normal levels on 04 July. Flux levels increased to moderate on 05 -
06 July and further increased to high levels on 07 - 08 July. The
period ended with flux at moderate levels.

Geomagnetic activity ranged from quiet to active levels during the
period, with an isolated minor storm period observed early on 05
July due to a nighttime substorm. From 04 - 08 July, activity was
primarily at quiet to unsettled levels with isolated active periods
observed on 05 and 06 July. An increase to quiet to active levels
occurred on 09 - 10 July due to the onset of another CH HSS.

Forecast of Solar and Geomagnetic Activity
13 July - 08 August 2011

Solar activity is expected to be at very low to low levels during
the forecast period.
```

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at high levels from 12 - 14 July due to enhanced wind speeds from the currently geoeffective CH HSS. Normal levels are expected to return from 15 - 19 July before increasing to moderate to high flux levels again 20 - 27 July after an anticipated period of elevated solar wind speeds associated a second recurrent CH. Flux values should return to normal levels 28 July - 02 August, before another brief period of moderate to high levels on 3 - 4 August. Normal levels are expected to prevail for the remainder of the period.

Geomagnetic field activity is expected to be at quiet to unsettled levels on 13 July due to CH HSS effects. Unsettled to active conditions with the chance for a minor storm is expected to begin on 14 July and persist for a day or two due to the anticipated arrival of the CME from 1103 UTC on 11 July. Mostly quiet conditions should return 16 - 17 July. An increase in activity ranging from quiet to active levels is forecast for 18 - 23 July due to another geoeffective HSS from a recurrent negative polarity CH. Conditions are forecast to be mostly quiet from 24 July - 03 August, with the exception of more CH HSS effects expected 27 - 29 July and 31 July - 02 August. Each of these events should each produce mostly unsettled and possibly even brief active conditions. Mostly quiet conditions are forecast to return on 03 August, before a SSBC from negative to positive polarity is expected on 04 August, when mostly unsettled conditions should occur in advance of yet another CH HSS that is expected to produce mostly unsettled conditions for the remainder of the period.

97. ANS-198 AMSAT News Service Weekly Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2011-07-18 14:28:57 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <000401cc4556$ffa37c30$feea7490$@net>
Source record: 323
Cross-posted to: rec.radio.amateur.space,rec.radio.info

AMSAT NEWS SERVICE
ANS-198

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:
* ARISSat-1/KEDR Activation Planned; Deployment Update
* DARA Fund Challenge Reminder
* Special Event Station: Celebrating the Flight of Liberty Bell 7
* Terrestrial APRS Golden Packet Test 24 July 2011
* 2011 AMSAT Symposium and Annual Meeting
* Free Sample Edition of OSCAR News
* Satellite Shorts From All Over
* ARISS Status - 11 July 2011

SB SAT @ AMSAT $ANS-198.01
ARISSat-1/KEDR Activation Planned; Deployment Update

AMSAT News Service Bulletin 198.01
>From AMSAT HQ SILVER SPRING, MD.
July 17, 2011
To All RADIO AMATEURS
BID: $ANS-198.01

ARISSat-1/KEDR Project Manager Gould Smith, WA4SXM said this week the latest status, discussed during the International ARISS tele-conference Sergey Samburov, RV3DR announced the ARISSat battery will be charged late July and a test of the system will be conduct-ed on the ISS from 1915 UTC 30 July to about 1200-1400 UTC 31 July.

The standard ARISSat-1/KEDR 2m downlink band plan should be trans-mitted. Additionally, the FM signal also downlinked on 437.55 MHz. More information as it becomes available.

During the test ARISSat-1 will be in LOW power mode, this means that it will transmit about 40 seconds and then shut down for 2 minutes and then transmit for 40 seconds, etc. The standard ARISSat-1/KEDR 2m downlink band plan should be transmitted. Additionally, the FM signal also downlinked on 437.55 MHz.

As to the date of deployment, Gould summarized, "The deployment date for ARISSat is still subject to change. As of July 14 we are looking at a 3 Aug 2011 date for EVA 29 and the ARISSat-1/KEDR deployment. The ARISSat/KEDR deployment is the first task of the EVA, so it will occur fairly soon after the EVA begins. We will let everyone know more as we know more."

145.950 MHz FM Downlink:

FM transmissions will cycle between a voice ID as RS01S, select telemetry values, 24 international greeting messages in 15 languages and SSTV images. One of the messages will be a conversation between Yuri Gagarin and ground control. See the next news item for pointers to get your station ready to receive the SSTV images.

435 MHz - 145 MHz Linear Transponder:

The linear transponder will operate in Mode U/V (70 cm Up, 2m Down). It is an 16 KHz wide inverting passband and the convention will be to TX LSB on the 435 MHz uplink and RX USB on the 145 MHz downlink. This mode is designed to work with low power transmitters and omni antenna.

145.919 MHz/145.939 MHz CW Beacon:

The CW transmissions will be callsign ID RS01S, select telemetry, and callsigns of people actively involved with the ARISS program.

145.920 MHz SSB BPSK-1000 Telemetry:

The BPSK transmissions will feature a new 1kBPSK protocol developed by Phil Karn, KA9Q to be readable in low signal level conditions. The BPSK data will transmit satellite telemetry.

The ARISSat-1/KEDR BPSK-1000 downlink is transmitted in SSB mode on 145.920 MHz. When the CW2 beacon on 145.919 MHz is active this indicates that the BPSK-1000 format is being transmitted. If the CW1 beacon on 145.939 MHz is active this indicates the backup of BPSK-400 format is being transmitted.

Transmitting at 100 mW, both BPSK rates include Forward Error Correction (FEC) and it is expected that modest quarter-wave antennas with low-loss coaxial cable will provide sufficient signal strength for decoding and display by the ARISSatTLM software.

Download the Windows ARISSatTLM free ground station soundcard demodulator and display software:
http://www.arissattlm.org/download/ARISSatTLM_050_Setup.exe

Download the Mac ARISSatTLM software:
http://www.arissattlm.org/download/ARISSATTLM.zip

The ARISSatTLM software user guide is available:
http://tinyurl.com/42uhtyf (amsat.org)

Get your color ARISSat-1/KEDR Frequency Guide:
http://tinyurl.com/4t497t2 (amsat.org)

ARISSat-1/KEDR Presentation Slides (~1MB)
http://tinyurl.com/4n4pzkm (amsat.org)

ARISSat-1/KEDR Dayton Presentation Slides
http://tinyurl.com/6zrfmzv (amsat.org)

Follow ARISSat-1/RadioSkaf-V on Twitter:
http://twitter.com/#!/arissat1
In USA you can also text 'follow Arissat1' to 40404 with your
cell phone. (leave off the quotes).

[ANS thanks ARISSat-1/KEDR Project Manager Gould Smith, WA4SXM for
the above information]

/EX

SB SAT @ AMSAT $ANS-198.02
DARA Fund Challenge Reminder

AMSAT News Service Bulletin 198.02
>From AMSAT HQ SILVER SPRING, MD.
July 17, 2011
To All RADIO AMATEURS
BID: $ANS-198.02

The Dayton Amateur Radio Association (DARA) fund raising challenge
for AMSAT continues whereby they will match on a 1:3 basis up to
$5,000.00 for donations made in 2011. That is, for every $3.00 that
AMSAT raises, DARA will provide $1.00 up to a maximum of $5,000
donated by DARA.

AMSAT kicked off the fundraising campaign at the Hamvention, where
donations began count against this goal. Please consider making a
donation to AMSAT at Hamvention or anytime this Spring as we strive
to meet this goal.

We appreciate DARA's support for AMSAT and see this as an opportunity
for donors to increase the impact of their donations by taking advan-
tage of this matching program.

[ANS thanks AMSAT Headquarters for the above information]

/EX

SB SAT @ AMSAT $ANS-198.03
Special Event Station: Celebrating the Flight of Liberty Bell 7

AMSAT News Service Bulletin 198.03
>From AMSAT HQ SILVER SPRING, MD.
July 17, 2011
To All RADIO AMATEURS
BID: $ANS-198.03

The 50th Anniversary of the Flight of the Liberty Bell 7 spacecraft by astronaut Virgil I. "Gus" Grissom will be celebrated by the Hoosier Hills Ham Club. This, by activating special event station W9GUS on Saturday, 23 July 2011.

The station will be located in Spring Mill State Park at the Grissom Memorial near Mitchell Indiana. Operation will be 10 am to 4 pm Central U-S Daylight Savings Time with stations on 40, 20 and possibly 6 meters.

Gus Grissom was one of the original NASA Project Mercury astronauts and a United States Air Force pilot. He was the second American to fly in space and the first astronaut to fly in space twice. Grissom along with fellow astronauts Ed White and Roger Chaffee died during a pre-launch test for the Apollo 1 mission at Cape Canaveral on 27 January 1967 when a spontaneous fire broke out in their command module.

[ANS thanks Amateur Radio NewslineT Report 1770 - July 15 2011 for the above information]

/EX

SB SAT @ AMSAT $ANS-198.04
Terrestrial APRS Golden Packet Test 24 July 2011

AMSAT News Service Bulletin 198.04
>From AMSAT HQ SILVER SPRING, MD.
July 17, 2011
To All RADIO AMATEURS
BID: $ANS-198.04

Bob Bruninga, WB4APR invites you to join in the terrestrial annual APRS Golden Packet attempt on Sunday 24 July Noon to 1600 local time. During this test Bob needs you and your D700 to drive/hike to the top of some of the highest mountains in the USA and set up as a portable APRS digipeater to see if we can link a Golden Packet across thousands of miles.

There is an attempt along the Appalachian Trail from Alabama to Maine and along the Pacific Crest trail from San Diego to Seattle. Good portable stations are needed on many mountain tops!

See these web pages for the details:
EAST COAST: http://www.aprs.org/at-golden-packet.html
WEST COAST: http://aprs.org/pct-golden-packet.html

[ANS thanks Bob Bruninga, WB4APR for the above information]

/EX

SB SAT @ AMSAT $ANS-198.05
2011 AMSAT Symposium and Annual Meeting

AMSAT News Service Bulletin 198.05
>From AMSAT HQ SILVER SPRING, MD.
July 17, 2011

To All RADIO AMATEURS
BID: $ANS-198.05

The 2011 Symposium hotel and registration web pages are now available on the AMSAT web site. The Symposium will be held in San Jose, CA November 4-6. The hotel selected is the Wyndham San Jose, close to the airport. Additional information about the 2011 AMSAT Symposium will be posted on the web site as it becomes available.

[ANS thanks Gould, WA4SXM, for the above information]

/EX

SB SAT @ AMSAT $ANS-198.06
Free Sample Edition of OSCAR News

AMSAT News Service Bulletin 198.06
>From AMSAT HQ SILVER SPRING, MD.
July 17, 2011
To All RADIO AMATEURS
BID: $ANS-198.06

AMSAT-UK have made available a free PDF of the Spring 2011 edition of their newletter OSCAR News.

It contains reports on four UK CubeSat projects currently being developed. News of new South African CubeSats and details of the telemetry on ARISsat-1/KEDR currently scheduled to be deployed from the International Space Station in August.

A printed copy of OSCAR News is posted to members each quarter.

Membership of AMSAT-UK is open to anyone who has an interest in Amateur Radio satellites/space activities, including the ISS. You do not have to have an amateur radio licence to join, many of our members are interested in listening to satellites and decoding the telemetry.

Read the OSCAR News PDF at
http://www.uk.amsat.org/on_193_final.pdf

Join AMSAT-UK at
http://tinyurl.com/JoinAMSAT-UK/

AMSAT-UK Colloquium July 30-31 Guildford
http://www.uk.amsat.org/colloquium-2011/

AMSAT-UK: http://www.uk.amsat.org/

[ANS thanks Trevor, M5AKA for the above information]

/EX

SB SAT @ AMSAT $ANS-198.07
Satellite Shorts From All Over

AMSAT News Service Bulletin 198.07
>From AMSAT HQ SILVER SPRING, MD.
July 17, 2011
To All RADIO AMATEURS
BID: $ANS-198.07

+ SO-67 has returned to operation after recovery from a cosmic ray upset. Operation over Australia, New Zealand, Japan is planned for July 18-31. The latest details are posted at: http://www.amsatsa.org.za/

+ Listen for Eric W4OTN, Amanda KI4IWS, Robin WA4WPD, Bill KG4CXY on July 29 to August 1 as they activate N4I from Core Banks Barrier Island (IOTA NA-067, USi NC033S, WLOTA 0596), Pamlico County, North Carolina. They will participate in the RSGB IOTA Contest. Outside of the contest they plan to be active 80-10m CW and SSB. Operation on 6m and satellites is being planned as well. QSL W4OTN via the bureau or direct at the address on QRZ.com. (rsgbiota.org)

+ The next date for the July Hudson Valley Satcom net is July 21 at 8:00 PM Eastern Daylight Time (UTC - 4). You can tune in via the 146.970 MHz Mt. Beacon repeater, PL 100.0 or via EchoLink on the N2EYH-L node. More info is available at: www.hvsatcom.org (Stu, WA2BSS)

+ Heads up this August 5-7: Be sure to look for W1AW/5 operating on all available satellites from Taos, New Mexico during the 2011 ARRL Rocky Mountain Division Convention. http://www.2011convention.org. More information can also be found on Ollie's AB1JO QRZ page: http://www.qrz.com/db/aj1o/

+ A new free sample edition of RadCom is now available to read on-line or download from the RSGB website. The sample RadCom is available in digital magazine format for reading on-line (Flash plug-in required). For those who would like to save the magazine to their computer, a 24MB PDF version is available: http://www.rsgb.org/sampleRadCom/

+ Dave, KB5WIA plans a grid-expedition to the rare grid squares in California's Lost Coast. If all goes well, he plans to be active from the grid intersection of CM79, CM89, CN70, and CN80 on Sunday August 7th and Monday August 8th. His plans include operating via as many linear and FM bird passes as available. Dave will post more information in his blog at: http://tinyurl.com/6z5xpjx

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-198.08
ARISS Status - 11 July 2011

AMSAT News Service Bulletin 198.08
>From AMSAT HQ SILVER SPRING, MD.
July 17, 2011

To All RADIO AMATEURS
BID: $ANS-198.08

1. Japanese Contact Successful

On Friday, July 8, students from the Matsumoto
School for the Visually Impaired,
Matsumoto, Nagano, Japan participated in an Amateur Radio on the
International Space Station (ARISS) contact with on-orbit astronaut
Satoshi Furukawa KE5DAW. An audience of approximately 40 people lis-
tened as eight students got in one question each before the ISS went
over the horizon. Media coverage included 5 newspapers.

The school, founded in 1912, currently has an enrollment of 29 students
of all ages, that all have one or more disabilities. By participating
in this NASA educational program, students have become more interested
in space and international communication.

2. Status of ARISS U.S. Proposal Process

ARISS has received 100 inquiries about the U.S. proposal process for
contacts that will be scheduled during the January - July 2012 time
frame. Proposals have started to come in and may be submitted until
the deadline of July 15, 2011. Another window of opportunity for U.S.
schools and organizations to submit proposals will open later in the
year.

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the
President's
Club. Members of the President's Club, as sustaining donors to AMSAT Project
Funds, will be eligible to receive additional benefits. Application forms
are
available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

98. TAMIL ACTRESS HOT PHOTOS & VIDEOS

Newsgroup: rec.radio.amateur.space
Date: 2011-07-19 17:46:17 UTC
From: devi <satyamsivam9030@gmail.com>
Message-ID: <d67a068e-840c-486d-8cdb-fa931fe5566e@m6g2000prh.googlegroups.com>
Source record: 324

FOR GOOD JOBS SITES TO YOU
http://goodjobssites.blogspot.com/

FOR HOT PHOTO&VIDEOS

KATRINA KAIF RARE PHOTOS
http://southactresstou.blogspot.com/2011/07/katrina-kaif-wallpapers.html
TAMANNA HOT SEXY PHOTOS & VIDEOS
http://southactresstou.blogspot.com/2011/07/tamanna-wallpapers.html
PRANITHA LATEST BEAUTIFUL PHOTOS
http://southactresstou.blogspot.com/2011/06/about-pranitha-praneetha-is-beautiful.html
KAJAL AGARWAL HOT SEXY PHOTOS
http://southactresstou.blogspot.com/2011/05/kajal-agarwal.html
KATRINA KAIF IN BEAUTIFUL RED DRESS
http://southactresstou.blogspot.com/2011/05/katrina-kaif_22.html
GOOD LOOKING DEEPIKA PADUKONE
http://southactresstou.blogspot.com/2011/05/deepika-padukone_22.html
AISHWARYA RAI UNBELIVABLE PHOTO
http://southactresstou.blogspot.com/2011/05/aishwarya-rai.html

FOR FAST UPDATES IN TELUGU FILM INDUSTRY
http://allyouwants.blogspot.com

99. Weekly Highlights of Solar and Geomagnetic Activity, 11 - 17 July 2011

Newsgroup: rec.radio.amateur.space
Date: 2011-07-19 21:30:07 UTC
From: SWPC.Webmaster@noaa.gov
Message-ID: <20110719213001.C27BD33C69@panix2.panix.com>
Source record: 325
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.info

```
:Product: Weekly Highlights and Forecasts
:Issued: 2011 Jul 19 1731 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
# Weekly Highlights and Forecasts
#
Highlights of Solar and Geomagnetic Activity
11 - 17 July 2011

Solar activity began the week at low levels for 11-12 July. Region
1249 (S18, L=244, class/area Cso/020 on 11 July) produced a C2/1f
flare at 1103 UTC on 11 July which was associated with a type II
radio sweep and a small coronal mass ejection. Region 1247 (S18,
L=269, class/area Esi/080 on 11 July) produced C1/Sf at 1449 UTC on
12 July. Activity levels declined to very low levels for the
remainder of the week from 13-17 July.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at
moderate levels on 11 July but increased to high levels on 12 July
and continued to reach high levels for the remaining days of the
reporting period.

Geomagnetic field activity began the week at unsettled levels with
some active periods (and some isolated storm periods at high
latitude). This initial activity appears to have been caused by a
combination of effects from a coronal mass ejection (observed on 09
July) and a high speed stream from a coronal hole. Conditions
gradually subsided for 12-14 July as the high speed stream persisted
but weakened; typical activity levels were quiet to unsettled with
isolated active periods and isolated storm periods at high latitude.
Quiet levels prevailed for the remainder of the period from 15-17
July.

Forecast of Solar and Geomagnetic Activity
20 July - 15 August 2011

Solar activity is expected to be very low to low for most of the
outlook interval. However, there is a chance that new, rapidly
emerging flux regions could increase activity to moderate levels at
any time during the outlook period.
```

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at background or moderate levels for most of the outlook interval. However, increases to high levels are expected for 21-24 July, 28-30 July, 1-3 July, and 6-9 August in response to recurrent high speed streams.

Geomagnetic field activity is expected to be unsettled with a chance for active periods for 20-22 July due to a favorably positioned coronal hole. Quiet levels are expected to prevail for 23-26 July. An increase to unsettled levels is expected for 27 July to 2 August due to another recurrent coronal hole. Quiet levels are expected for 3 August followed by another increase to unsettled levels for 04-10 August due to recurrence. 11-13 August is expected to be quiet and an increase to unsettled is expected for 14-15 August, again due to recurrence.

100. ANS-205 AMSAT News Service Weekly Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2011-07-24 02:01:38 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <002001cc49a5$96c13e20$c443ba60$@net>
Source record: 326
Cross-posted to: rec.radio.amateur.space,rec.radio.info

AMSAT NEWS SERVICE
ANS-205

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* EVA for ARISSat-1/KEDR Deployment Planned for August 3
* AMSAT Board of Directors Ballots in the Mail
* Satellite Awards
* AMSAT-UK Colloquium to Activate Station for ARISSat-1/KEDR Test
* 2011 AMSAT Symposium and Annual Meeting
* 2011 AMSAT Space Symposium First Call for Papers
* Satellite Shorts From All Over
* ARRISat-1 PCSAT32 Doppler info
* AMSAT-UK Joins Response to DCMS Spectrum Plan Affecting Satellite Band
* ARISS Status - 18 July 2011

SB SAT @ AMSAT $ANS-205.01
EVA for ARISSat-1/KEDR Deployment Planned for August 3

AMSAT News Service Bulletin 205.01
>From AMSAT HQ SILVER SPRING, MD.
July 24, 2011
To All RADIO AMATEURS
BID: $ANS-205.01

Gould summarized, "As of July 22 we are looking at an August 3, 2011 date for EVA 29 and the ARISSat-1/KEDR deployment, subject to change due to ISS schedules. The preliminary Russian EVA-29 timeline shows the ARISSat-1/KEDR deployment is the first task of the EVA, so it will occur fairly soon after the EVA begins. We will let everyone know more as we know more."

The ARISSat-1/KEDR battery is scheduled to be charged 24 hours beginning 24 July at 09:45 UTC. A test of the satellite inside the ISS is scheduled to run from 1900 UTC on Saturday, July 30 and turned off at 14:30 UTC on July 31.

145.950 MHz FM Downlink

FM transmissions will cycle between a voice ID as RS01S, select telemetry values, 24 international greeting messages in 15 languages and SSTV images. One of the messages will be a conversation between Yuri Gagarin and ground control.

435 MHz - 145 MHz Linear Transponder

The linear transponder will operate in Mode U/V (70 cm Up, 2m Down). It is an 16 KHz wide inverting passband and the convention will be to TX LSB on the 435 MHz uplink and RX USB on the 145 MHz downlink. This mode is designed to work with low power transmitters and omni antenna.

145.919 MHz/145.939 MHz CW Beacons

The CW transmissions will be callsign ID RS01S, select telemetry, and callsigns of people actively involved with the ARISS program.

145.920 MHz SSB BPSK-1000 Telemetry

The BPSK transmissions will feature a new 1kBPSK protocol developed by Phil Karn, KA9Q to be readable in low signal level conditions. The BPSK data will transmit satellite telemetry. When the CW2 beacon on 145.919 MHz is active this indicates that the BPSK-1000 format is being transmitted. If the CW1 beacon on 145.939 MHz is active this the backup of BPSK-400 format is being transmitted.

To find the links to the ARISSatTLM software for Windows and Mac, SSTV software for Windows and Mac, and ARISSat-1/KEDR technical data please go to http://www.amsat.org.

[ANS thanks ARISSat-1/KEDR Project Manager Gould Smith, WA4SXM for the above information]

/EX

SB SAT @ AMSAT $ANS-205.02
AMSAT Board of Directors Ballots in the Mail

AMSAT News Service Bulletin 205.02
>From AMSAT HQ SILVER SPRING, MD.
July 24, 2011
To All RADIO AMATEURS
BID: $ANS-205.02

The AMSAT Office has mailed the 2011 Ballot for the AMSAT Board of Directors. The deadline for the receipt of your ballot in Silver Spring, MD is September 15, 2011.

Four director's terms expire this year:

Barry Baines, WD4ASW
Alan Biddle, WA4SCA

Drew Glasbrenner, KO4MA
Tony Monteiro, AA2TX

The 2011 AMSAT Official Ballot for the Board of Directors includes these nominees (alphabetically by last name):

Barry Baines, WD4ASW
Alan Biddle, WA4SCA
Steve Coy, K8UD
Drew Glasbrenner, KO4MA
Mark Hammond, N8MH
Tony Monteiro, AA2TX
Patrick Stoddard, WD9EWK

The four candidates receiving the highest number of votes will be seated as full Board members for two year terms. The two candidates receiving the next highest number of votes will be seated as alternate Board members for one year terms.

A statement and biographical information from each candidate is included in the ballot mailing for your review. Your vote is important and is one of the privileges of AMSAT membership.

[ANS thanks AMSAT Headquarters for this information]

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SB SAT @ AMSAT $ANS-205.03
Satellite Awards

AMSAT News Service Bulletin 205.03
>From AMSAT HQ SILVER SPRING, MD.
July 24, 2011
To All RADIO AMATEURS
BID: $ANS-205.03

AMSAT Director Contests and Awards, Bruce Paige, KK5DO observed this week, "Normally I am able to wait 4-6 weeks before posting a list of AMSAT awards. However, something must have gotten in the water and in the past few days the awards have sky rocketed."

Bruce noted the effort of Matt, N8MS, at the ARRL Teacher's Institute 2, where 8 ham teachers worked their first satellite contact. They are included in the list below. Congratulations to all!

The following have entered into the Satellite Communicators Club for making their first satellite QSO.
+ Pam Kalafice, KD8MUC
+ George Wheeler, W7LX
+ Thomas Maxwell, AE5QB
+ Jerry Taylor, AC0PF
+ Stephen McClune, KB3FKO
+ Larry Brim, KI6FBT
+ Jackie Smith, KJ4SVQ

+ Larry Kendall, K6NDL
+ Samuel Saladino, NW9T
+ Walter Lemons, AE5IT
+ Stephen Reinen, N8BP
+ Lee Olson, N9LO
+ Thomas Talley, KA9QPG

The following have earned the AMSAT Communications Achievement Award.
+ George Henry, KA3HSW, #540
+ Brandon Rasmussen, K7BBR, #541

The following have earned the South Africa Satellite Communications
Achievement award.
+ George Henry, KA3HSW, #US169
+ Brandon Rasmussen, K7BBR, #US170

To see all the awards visit http://www.amsat.org

[ANS thanks AMSAT Director Contests and Awards, Bruce Paige, KK5DO
for the above information]

/EX

SB SAT @ AMSAT $ANS-205.04
AMSAT-UK Colloquium to Activate Station for ARISSat-1/KEDR Test

AMSAT News Service Bulletin 205.04
>From AMSAT HQ SILVER SPRING, MD.
July 24, 2011
To All RADIO AMATEURS
BID: $ANS-205.04

The AMSAT-UK International Space Colloquium at the Holiday Inn,
Guildford, GU2 7XZ, England will be taking place during the acti-
vation of ARISSat-1/KEDR.

Members of AMSAT-UK hope to be active during the ARISSat-1 tests
from the GB4FUN communications module situated in the Holiday Inn
parking lot. See GB4FUN: http://www.gb4fun.org.uk/

It is intend to use the GB4FUN station equipment to listen to the
various ARISSat-1/KEDR signals. In addition they will be experi-
menting with the use of FUNcube Dongle software defined radios to
receive the ARISSat-1/KEDR signals with a variety of different
antennas.

The Colloquium is open to all Radio Amateurs and SWL's. Either day
passes or full packages comprising overnight accommodation and meals
are available. For futher information see:
http://www.uk.amsat.org/colloquium-2011/

BATC and AMSAT volunteers will be streaming video of the event live,
enabling it to be seen around the world.

Clearly a webcast cannot match actually being there, with the opportunity to chat to satellite builders and inspect space hardware, but if you can't get to Guilford then the webcast provides the next best thing.

The webcast will be at http://www.batc.tv

[ANS thanks Trevor, M5AKA for the above information]

/EX

SB SAT @ AMSAT $ANS-205.05
2011 AMSAT Symposium and Annual Meeting

AMSAT News Service Bulletin 205.05
>From AMSAT HQ SILVER SPRING, MD.
July 24, 2011
To All RADIO AMATEURS
BID: $ANS-205.05

AMSAT announces the 2011 AMSAT Space Symposium will be held on Friday, November 4th through Sunday, November 6th in San Jose, CA. This annual gathering will feature:

+ Space Symposium with Amateur Satellite Presentations
+ Operating Techniques, News, & Plans from the Amateur Satellite World
+ Board of Directors Meeting open to AMSAT members (Nov. 3-4)
+ Meet Board Members and Officers
+ Annual General Membership Meeting
+ Annual Banquet-Keynote Speaker and Door Prizes

The 2011 Symposium hotel and registration web pages are now available on the AMSAT web site. You may register for the Symposium and Annual Banquet at the AMSAT Store:
http://www.amsat-na.com/store/SymposiumReg.php

The hotel selected is the Wyndham San Jose, close to the airport. The AMSAT discount rate is $79.00+taxes per night. The reservation block code when calling the hotel directly is "AMSAT". The hotel telephone number is 408-453-6200. If you are making reservations on-line use 1031FSJAM for the group code. The direct link to the hotel web page is: http://www.wyndham.com/hotels/SJCAP/main.wnt

If you are planning to book a room on dates other than November 2, 3, 4, 5, you will have to call the hotel directly and ask for *in-house reservations*. You can get the $79 rate 3 days before and 3 days after the above dates but you cannot book the room on their website. Any problems, give Martha a call at the AMSAT Office: 301-589-6062.

Additional information about the 2011 AMSAT Symposium will be posted on the AMSAT web site as it becomes available.

[ANS thanks the 2011 Symposium Committee for the above information]

/EX

SB SAT @ AMSAT $ANS-205.06
2011 AMSAT Space Symposium First Call for Papers

AMSAT News Service Bulletin 205.06
>From AMSAT HQ SILVER SPRING, MD.
July 24, 2011
To All RADIO AMATEURS
BID: $ANS-205.06

This is the first call for papers for the 2011 AMSAT Space Symposium to be held Friday, November 4th through Sunday, November 6th at the Wyndham San Jose Hotel, San Jose, California.

Proposals for papers, symposium presentations and poster presentations are invited on any topic of interest to the amateur satellite community.

We request a tentative title of your presentation as soon as possible, with final copy submitted by October 1, 2011 for inclusion in the printed proceedings.

Abstracts and papers should be sent to Dan Schultz, N8FGV, at: n8fgv@amsat.org.

[ANS thanks Dan Schultz, N8FGV for the above information]

/EX

SB SAT @ AMSAT $ANS-205.07
ARRISat-1 PCSAT32 Doppler info

AMSAT News Service Bulletin 205.07
>From AMSAT HQ SILVER SPRING, MD.
July 24, 2011
To All RADIO AMATEURS
BID: $ANS-205.07

The deployment of ARRISat-1 is approaching. Here is a collection of data on the various modes for use in configuring SATPC32. Note that you will need to tweak the sideband frequencies slightly to account for rig calibration and other issues, as usual, but these should be close. You can paste these in the DOPPLER.SQF file, but before you do, please read on!

ARISSat-1,145918.5,0,USB,,,0,0,BPSK/CW-2
ARISSat-1,145950.0,0,FM,,,0,0,VOICE/SSTV
ARISSat-1,145930.0,435750.0,USB,LSB,REV,0,0,XPDR
ARISSat-1,145938.5,0,USB,,,0,0,CW-1

Since ARISSat-1 will be deployed by a gentle push from the ISS by Cosmonauts, the ISS Keps will be good until separate Keps are released by Space Track. One way to handle the transition is to change the Doppler information slightly:

ISS,145918.5,0,USB,,,0,0,BPSK/CW-2
ISS,145950.0,0,FM,,,0,0,VOICE/SSTV
ISS,145930.0,435750.0,USB,LSB,REV,0,0,XPDR
ISS,145938.5,0,USB,,,0,0,CW-1

Paste the ARISSat-1 data as desired, and also paste the ISS version of the data into the DOPPLER.SQF file after the regular ISS data. For the final test aboard the ISS, and initially after deployment, select ISS tracking, and then select the desired ARRISat-1 frequency data at the end of the list in the CAT window.

After the ISS and ARISSat-1 are far enough apart that independent Keps are available, you can begin using ARISSat-1 as a separate object by adding it to the objects you track in the Satellites menu window. The satellite may be identified as ARISSat-1, but may well have some other designation which will be reported. If it is not ARRISat-1, then change the name in the first group above to that used in the Keps. They must agree exactly for SATPC32 to match the Doppler data with the satellite. (You can also use the AmsatNames.txt file, which is covered in the SATPC32 documentation.) You can then delete the extra ISS data if you wish. They won't hurt anything, but it will clean up the ISS CAT window.

[ANS thanks Alan, WA4SCA, for the above information]

/EX

SB SAT @ AMSAT $ANS-205.08
Satellite Shorts From All Over

AMSAT News Service Bulletin 205.08
>From AMSAT HQ SILVER SPRING, MD.
July 24, 2011
To All RADIO AMATEURS
BID: $ANS-205.08

+ Congratulations to Ron, N8RO for attaining Satellite VUCC # 219!

+ Look for Makoto, JI5RPT to be active as JD1BLY from Chichijima Island (IOTA AS-031) Ogasawara. Operation is planned for 40m to 6m and Satellite CW/SSB/DIGI between August 1-7. QSL via JI5RPT. Web based log will be found at: http://www.ji5rpt.com/jd1/ and you are also invited to monitor Twitter: http://twitter.com/jd1bly (ji5rpt@jarl.com)

+ TP50, FRANCE. The "Council of Europe Radio Amateur Club" (CERAC - TP2CE) will be active as TP50CE during the RSGB IOTA Contest (July 30-31). Activity is to celebrate the 50th anniversary of the European Social Charter. Operations are usually on all HF bands and modes, possibly the satellites. QSL via F5LGF. An online log search will be available at: http://ewwa.free.fr (Ohio/Penn DX Bulletin No. 1019)

+ The Amateur Radio functions of the Tokyo university PRISM satellite have been tested and it is hoped it will be generally available soon. It carries a beacon on 437.250 MHz and a data downlink on 437.425 MHz

with a downlink power up to 3 watts.
PRISM Web: http://www.space.t.u-tokyo.ac.jp/prism/en/main.html
Snapshot of decoding screen captured by Mineo Wakita, JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/10716pri.png

+ A 47 minute video of Space Shuttle Atlantis undocking from the
International Space Station can be viewed at UniverseToday.com
http://tinyurl.com/448ra22
Additional video can be viewed at:
http://spaceflightnow.com/shuttle/sts135/status.html

+ NASA released the videos taken from the cameras mounted on the
solid rocket boosters for Atlantis' launch for the STS-135
mission: http://tinyurl.com/6z3gohl (UniverseToday.com)

+ The schedules for Australasia and Eastern Asia for 18 - 31 July
are now on http://www.amsatsa.org.za. The next schedule starts
on August 1 with the Americas.

+ The AO-7 footprint continues to be long according to Luis, LU6QI.
He reports a successful AO-7 Mode B contact with Drew, KO4MA for
a distance of 7062 KM. Luis invites more North American stations
to attempt a contact via AO-7 Mode A or B, and FO-29. Contact
Luis by e-mail to set up a schedule: lu6quintas@gmail.com

+ Bill OM3BD/NZ5N operating from Grid JN88mf reported good conditions
on AO-7. He worked 10 stations, including KD8CAO, WB8TGY, and K8YSE.

[ANS thanks everyone for the above information]

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SB SAT @ AMSAT $ANS-205.09
AMSAT-UK Joins Response to DCMS Spectrum Plan Affecting Satellite Band

AMSAT News Service Bulletin 205.09
>From AMSAT HQ SILVER SPRING, MD.
July 24, 2011
To All RADIO AMATEURS
BID: $ANS-205.09

The UK Department of Culture, Media and Sport (DCMS), a government
agency, consultation sought opinion on the release of 500MHz of public
sector spectrum by 2020. The full UK Government document may be viewed
on-line at:
http://www.culture.gov.uk/images/publications/Spectrum_Release.pdf

A joint response from the RSGB, UK Microwave Group, AMSAT-UK and
BATC is among the 31 responses to the DCMS consultation on releas-
ing public sector spectrum.

The response notes that the Amateur Radio and Amateur Satellite ser-
vices successfully share spectrum with the current public services
under consideration for reallocation. In regards to the proposed

spectrum under consideration for reallocation the joint Amateur Radio response states that the 435-438 MHz sub-section is the largest active band for international amateur satellites.

RSGB, UK Microwave Group, AMSAT-UK and BATC invite further consulation with the DCMS, "We would caution that any precipitous decision and uncoordinated release would impair a raft of innovative activity that is aligned with many DCMS and other national goals. We therefore look forward to further discussions with DCMS."

The joint RSGB, UK Microwave Group, AMSAT-UK and BATC response can be read at: http://tinyurl.com/3stw6wn (culture.gov.uk)

All of the responses can be read at:
http://www.culture.gov.uk/consultations/8297.aspx

[ANS thanks the Southgate ARC News Site for the above information]

/EX

SB SAT @ AMSAT $ANS-205.10
ARISS Status - 18 July 2011

AMSAT News Service Bulletin 205.10
>From AMSAT HQ SILVER SPRING, MD.
July 24, 2011
To All RADIO AMATEURS
BID: $ANS-205.10

1. Ottawa Contact Successful

On Thursday, July 14, the City of Ottawa Sports Recreation Camp in Ontario, Canada took part in an Amateur Radio on the International Space Station (ARISS) contact. Telebridge station W6SRJ in California provided the connection. One hundred twenty-five students, twelve counselors and many parents were present for the event and watched as the youth asked 16 questions of ISS crew member Ron Garan, KF5GPO. Global National (Canadian network) aired the story nationally and Your Ottawa Region posted an article on its site:
http://tinyurl.com/427tv88

2. ARISS-U.S. Receives Proposals for Contacts

The NASA Teaching From Space Office received over 100 inquiries about the U.S. proposal process for ARISS contacts that will be scheduled during the January - July 2012 time frame. Twenty-five schools met the July 15 deadline and submitted proposals. The selection process will begin shortly. Another window of opportunity for U.S. schools and organizations to submit proposals will open later in the year.

3. ARRL QST Posts ARISS News

The American Radio Relay League (ARRL) included an ARISS item in its August QST about ARRL at Hamvention, and highlighted Astronaut Doug Wheelock's participation, particularly with the youth activities.

4. AMSAT Provides ARISSat-1 Status

The AMSAT (Radio Amateur Satellite Corporation) News Service July 17 bulletin (ANS-198) included a status on ARISSat-1. The battery will be charged July 27 or 28 and a test will be conducted on the ISS over the weekend of July 30-31. Deployment is scheduled for August 3. "ARISSat-1/KEDR Activation Planned; Deployment Update" may be viewed here: http://amsat.org/pipermail/ans/2011/000532.html

5. Amateur Radio Newsline on ARISSat-1 Deployment

On July 15, the Amateur Radio Newsline Report 1770 included a status on the deployment date of ARISSat-1. The story may be found under the heading "Ham Radio in Space."
See: ftp://ftp.arnewsline.org/quincy/News/news.txt

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be Eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Dee Interdonato, NB2F

101. Weekly Highlights of Solar and Geomagnetic Activity, 18 - 24 July 2011

Newsgroup: rec.radio.amateur.space
Date: 2011-07-26 21:30:06 UTC
From: SWPC.Webmaster@noaa.gov
Message-ID: <20110726213002.0FAF133C6F@panix2.panix.com>
Source record: 327
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.info

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:Product: Weekly Highlights and Forecasts
:Issued: 2011 Jul 26 1731 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
# Weekly Highlights and Forecasts
#
Highlights of Solar and Geomagnetic Activity
18 - 24 July 2011

Solar activity was at very low to low levels during the period. The
summary period began at low levels, when Region 1254 (S24, L=136,
class/area Cso/110 on 20 July) produced the largest event of the
period, a C1/Sf flare at 1028 UTC. On 19 July, solar activity
decreased to very low levels and remained at these levels for the
rest of the summary period. Even though numerous regions were
numbered and tracked during the summary period, all regions either
remained stable and quiet, producing low level B-class events, or
diminished to spotless plage.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at
normal to moderate levels from 18-19 July. High levels were observed
for the remainder of the period, 20-24 July, in response to a
coronal hole high speed stream (CH HSS).

Geomagnetic activity ranged during the period between quiet to minor
storm levels, with a few isolated major storms occuring at high
latitudes due to coronal hole high-speed stream effects. Early on 18
July, quiet to unsettled levels were observed due to a solar sector
boundary crossing (SSBC), as the Earth moved from a positive to a
negative polarity region of the IMF. On 19 July, measurements from
the ACE spacecraft indicated the onset of another CH HSS while
geomagnetic levels also increased to mostly active coniditions at
mid latitudes. On 20 July, quiet to active levels were again
observed with an isolated major storm period occuring at high
latitudes between 0900-1200Z. Conditions on 21 and 22 July were also
observed at quiet to unsettled levels on both days. On 22 July,
conditions included a major storm period observed at high latitudes.
A return to quiet to unsettled levels was observed on 23-24 July, as
effects of the CH HSS finally deminished.
```

Forecast of Solar and Geomagnetic Activity
27 July - 22 August 2011

Solar activity is expected to be at very low to low levels during the forecast period. However, there is a chance that new, rapidly emerging flux regions could increase activity to moderate levels at any time during the outlook period.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to start the period at moderate to normal levels on 27 - 30 July, before increasing to high flux levels on 31 July - 02 August, as the result of elevated solar winds from a CH HSS. Moderate to normal levels are expected from 03-06 August after solar winds subside. A return to moderate to high levels is expected 07-13 August and once again from 16- 22 August as the result of two solar wind speed increases from two more coronal holes.

Geomagnetic activity is expected to be at quiet levels on 25 July. Quiet to unsettled levels are expected from 26 - 27 July as another CH HSS becomes geoeffective. A return to mostly quiet conditions is expected on 28 July. Quiet to unsettled levels are forecast on 29-31 July as a northern polar CH HSS extension moves into a geoeffective position. Afterwards, quiet levels are expected to prevail between 01 and 04 August. Conditions are expected to increase again, ranging from quiet to active levels 04-11 August as another recurrent CH HSS is expected. Mostly quiet conditions should return 12-14 August before the next CH HSS is expected 15-19 August, when unsettled to active conditions return. A brief retreat to mostly quiet levels is expected on 20 August before the period finally ending with mostly unsettled to active conditions as yet another recurrent CH HSS becoming geoeffective 21-22 August.

102. ANS-209 AMSAT News Service Special Bulletin - ARISSat-1/KEDR

Newsgroup: rec.radio.amateur.space
Date: 2011-07-28 00:29:49 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <003201cc4cbd$71c900b0$555b0210$@net>
Source record: 328
Cross-posted to: rec.radio.amateur.space,rec.radio.info

SB SAT @ AMSAT $ANS-209.01
AMSAT News Service Special Bulletin ANS-209 - ARISSat-1/KEDR

AMSAT News Service Bulletin 209.01
>From AMSAT HQ SILVER SPRING, MD.
July 28, 2011
To All RADIO AMATEURS
BID: $ANS-209.01

ANS-208
In this Special Bulletin:

* Deployment of ARISSat-1/KEDR Satellite Expected August 3
* ARISSat-1/KEDR Test Transmissions Planned From ISS July 30-31

SILVER SPRING, MARYLAND (AMSAT News Service) After a postponed deployment in February from the International Space Station (ISS), the ARISSat-1/KEDR amateur radio satellite is expected to begin its mission on August 3, 2011. This was the word received from Energia official, Sergey Samburov during an ARISS teleconference on July 19. Deployment of the craft is planned during EVA-29.

NASA TV will cover the EVA live starting at 1400 GMT on August 3.
1430: Hatch Open
1446: Egress ARISSat-1 and secure to airlock ladder
1452: Remove solar panel covers
1507: Translate to deploy site, activate PWR, TIMER1 and TIMER2 switches, verify LEDs on, and deploy
(Internet streaming: http://www.nasa.gov/multimedia/nasatv/index.html)

ARISSat-1/KEDR is a satellite designed and built by amateur radio operators to specifically interest students in scientific and technological careers. Through the use of ham radio equipment, students and teachers should be able to access and utilize the satellite from a classroom environment with minimal set up.

ARISSat-1/KEDR is a cooperative effort between AMSAT, ARISS (Amateur Radio on the International Space Station,) RSC-Energia (The Russian Space Agency) and NASA. The design, development and construction of the satellite was done by AMSAT volunteers. Original plans called for the satellite to be housed inside an old Russian spacesuit, but when the suit became unavailable, a spaceframe was developed to house the radio equipment and solar panels. The new satellite was named ARISSat-1/KEDR. Another name for the spacecraft is RadioSkaf-V. The transmitted callsign will be RS01S.

The mission was specifically designed as an education-based satellite. Some of its broadcast features include a voice identification, voice, digital and morse code telemetry, stored image and on-board camera transmissions via Slow Scan TV and digital telemetry from a Russian science experiment that will measure vacuum in earth's lower atmosphere. Other aspects of the mission include CW (Morse code) and voice message contests to interest students in participating along with stored images submitted by students all over the world as part of its payload.

ARISSat-1/KEDR Test Transmissions Planned From ISS July 30-31

Test transmissions from ARISSat-1/KEDR are scheduled to begin four days prior to deployment at 19:15 UTC on July 30 and then continue until 1430 UTC on July 31.

The satellite will be connected to an external antenna mounted on the ISS during testing. During the test ARISSat-1/KEDR will be in LOW power mode, this means that it will transmit about 40 seconds and then shut down for 2 minutes and then transmit for again for 40 seconds.

To listen for ARISSat-1/KEDR signals, FM receivers should be tuned to 145.950 MHz. Even though the satellite will only have an output of 250 mW on 2 meters, a standard FM handy talkie equipped with a quarter-wave whip antenna should be able to receive the voice ID, voice telemetry and greeting messages as the craft passes overhead.

SSTV transmissions may also be demodulated and viewed using a free downloadable program such as MMSSTV that is available at:
http://mmhamsoft.amateur-radio.ca/pages/mmsstv.php.
For Mac users, Multiscan2 is available at:
http://web.me.com/kd6cji/MacSSTV/MultiScan.html.

Those planning to monitor voice broadcasts from ARISSat-1/KEDR during the July 30 - 31 test are requested to make note of the telemetry battery voltage values and UTC time, and then submit their records by e-mail to: julytest@arissat1.org.

Digital telemetry will be sent at 145.920 MHz. Given the low duty cycle of the spacecraft, those planning to receive the digital telemetry are encouraged to record the entire signal band using the FunCube dongle or SDR-IQ receivers. Software for demodulating the BPSK-1000 telemetry is available at http://www.arissattlm.org; the software Quick Start Guide is available on the link on the http://www.amsat.org front page.

After it is deployed from the International Space Station, ARISSat-1/KEDR is expected to be in orbit for a period of up to six months.

More information on the transmission schedule and overall mission of ARISSat-1/KEDR can be found at:

ARISSat-1/KEDR Web site: http://www.arissat1.org
AMSAT Web site: http://www.amsat.org
ARISS Web site: http://www.ariss.org
ARISS Facebook Page: Amateur Radio on the ISS (ARISS)
ARISS Twitter site: @ARISS_status

The Radio Amateur Satellite Corporation (AMSAT) is a non-profit, volunteer organization which designs, builds and operates experimental amateur radio satellites and promotes space education. We work in partnership with government, industry, educational institutions and fellow amateur radio societies. We encourage technical and scientific innovation, and promote the training and development of skilled satellite and ground system designers and operators. Our vision is to deploy satellite systems with the goal of providing wide area and continuous coverage for amateur radio operators worldwide. AMSAT is also an active participant in human space missions and supports satellites developed in cooperation with the educational community and other amateur satellite groups.

Amateur Radio on the International Space Station (ARISS) is a volunteer program which inspires students, worldwide, to pursue careers in science, technology, engineering and math through amateur radio communications opportunities with the International Space Station on-orbit crew. Students learn about life on board the ISS and explore Earth from space through science and math activities. ARISS provides opportunities for the school community (students, teachers, families and local residents) to become more aware of the substantial benefits of human space flight and the exploration and discovery that occur on space flight journeys along with learning about technology and amateur radio.

[ANS thanks the ARISSat-1/KEDR Team for the above information]

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103. ANS-212 AMSAT News Service Weekly Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2011-07-31 02:29:16 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <001701cc4f28$ec721f50$c5565df0$@net>
Source record: 329
Cross-posted to: rec.radio.amateur.space,rec.radio.info

AMSAT NEWS SERVICE
ANS-212

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* ARISSat-1/KEDR On-Air Test Successful; Next: Deployment on August 3
* Radio-to-Soundcard Interface For Access to ARISSat-1/KEDR Bandwidth
* Get Ready for ARISSat-1/KEDR BPSK-1000 Telemetry
* Get Ready for ARISSat-1/KEDR SSTV Reception
* N7HPR Blog in EE Times Magazine Documents ARISSat-1/KEDR Development
* View Student Projects Flying on ARISSat-1
* FUNcube Vibration Testing Videos
* Satellite Shorts From All Over

SB SAT @ AMSAT $ANS-212.01
ARISSat-1/KEDR On-Air Test Successful; Next: Deployment on August 3

AMSAT News Service Bulletin 212.01
>From AMSAT HQ SILVER SPRING, MD.
July 31, 2011
To All RADIO AMATEURS
BID: $ANS-212.01

ARISSat-1/KEDR ON-AIR TEST SUCESSFUL

ARISSat-1/KEDR reception reports from the July 30 - 31 on-air test aboard the International Space Station have been received from amateur radio stations around the world. Africa, South America, parts of Asia were within range of the footprint first. Next Europe and North America will be in range.

Here is a sampling of the signal reports received via amsat-bb:

Johan, ZS1I - in South Africa reported hearing the ARISSat-1/KEDR SSTV signal using a handheld and a rubber duck antenna.

Nader Omer, ST2NH - In Khartoum, Sudan Last pass 22.50 UTC I
heard a weak voice before LOS! It sounded like a recorded message.
No SSTV or Telemetry.

Mineo Wakita, JE9PEL - In Japan, I heard ARISSat-1/KEDR VOICE and
SSTV strong signal, S9 + over 40dB at 23:12-23:22UTC, 30 Jul 2011.
The received SSTV picture can be viewed at:
http://www.ne.jp/asahi/hamradio/je9pel/10731ari.png

Masa, JN1GKZ - In Japan, the 0051z pass was also good signal from
ARISSat-1/KEDR and ISS. SSTV, voice msg and voice tlm were heard.
At 0056z the CW telemetry decoded as:
[bat 29.72v -214ma rf 346ma hi this is ariss at 1 r]
I got SSTV picture from ARISSat-1 at 2140z. The picture is noisy
but fine!

Luciano, PY5LF - In Brazil, signal heard a few minutes ago on
145.950. Recorded video of the pass at:
http://www.youtube.com/watch?v=z_-DLZq9gmc

Reports received from Sergey Samburov, RV3DR say that ARISSat-1/KEDR
is in 'test mode', using the same setup as was used back in April
for the Gagarin Commemoration where the TM-D710 on board the ISS
is 'repeating' the ARISSat-1/KEDR output signal on 437.550 MHz

Please report signals heard, location, and equipment by e-mail to:
julytest@arissat1.org.

NEXT: DEPLOYMENT ON AUGUST 3

ARISSat-1/KEDR is now ready for deployment from the International
Space Station during EVA 29 on August 3.

NASA TV will cover the EVA live starting at 1400 GMT on August 3.
1430: Hatch Open
1446: Egress ARISSat-1/KEDR and secure to airlock ladder
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1507: Translate to deploy site, activate PWR, TIMER1 and TIMER2
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the radio equipment and solar panels. The new satellite was named

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The mission was specifically designed as an education-based satellite. Some of its broadcast features include a voice identification, voice, digital and morse code telemetry, stored image and on-board camera transmissions via Slow Scan TV and digital telemetry from a Russian science experiment that will measure vacuum in earth's lower atmosphere. Other aspects of the mission include CW (Morse code) and voice message contests to interest students in participating along with stored images submitted by students all over the world as part of its payload.

145.950 MHz FM Downlink

FM transmissions will cycle between a voice ID as RS01S, select telemetry values, 24 international greeting messages in 15 languages and SSTV images. One of the messages will be a conversation between Yuri Gagarin and ground control.

If you successfully receive the SSTV transmissions, you are invited to upload your picture to to the ARISS SSTV Gallery:
http://www.amsat.org/amsat/ariss/SSTV/

435 MHz - 145 MHz Linear Transponder

The linear transponder will operate in Mode U/V (70 cm Up, 2m Down). It is an 16 KHz wide inverting passband and the convention will be to TX LSB on the 435 MHz uplink and RX USB on the 145 MHz downlink. This mode is designed to work with low power transmitters and omni antenna.

145.919 MHz/145.939 MHz CW Beacons

The CW transmissions will be callsign ID RS01S, select telemetry, and callsigns of people actively involved with the ARISS program.

145.920 MHz SSB BPSK-1000 Telemetry

The BPSK transmissions will feature a new 1kBPSK protocol developed by Phil Karn, KA9Q to be readable in low signal level conditions. The BPSK data will transmit satellite telemetry. When the CW2 beacon on 145.919 MHz is active this indicates that the BPSK-1000 format is being transmitted. If the CW1 beacon on 145.939 MHz is active this indicates the backup of BPSK-400 format is being transmitted.

AMSAT needs your telemetry from ARISSat-1/KEDR. Since there are no "Whole Orbit Data" storage mechanisms onboard ARISSat-1/KEDR, your submissions are the only way for AMSAT to collect the spacecraft telemetry and KURSK experiment results.

+ The telemetry may be recorded using the FunCube dongle or SDR-IQ receivers. After decoding the recorded file ARISSat-1/KEDR and

Kursk telemetry CSV files (in the ARISSatTLM folder) can be sent
as an e-mail attachment to telemetry@arissattlm.org

+ If you are running ARISSatTLM and receiving the signal "live"
from ARISSat-1/KEDR, please enable the telemetry forwarding option.

+ The latest telemetry can be seen LIVE on your computer or cell
phone at: http://www.arissattlm.org/mobile

TRACK STATUS on OSCAR STATUS PAGE

David Carr, KD5QGR will add ARISSat-1/KEDR to the list of satel-
lites at the popular "Live OSCAR Satellite Status Page" at:
http://oscar.dcarr.org/ You are invited to submit your reports
on this page.

USEFUL LINKS

Download the Windows and Mac versions of the ARISSatTLM free
ground station soundcard demodulator and display software:
http://www.arissattlm.org

The ARISSatTLM software user guide is available:
http://tinyurl.com/42uhtyf (amsat.org)

Get your color ARISSat-1/KEDR Frequency Guide:
http://tinyurl.com/4t497t2 (amsat.org)

ARISSat-1/KEDR Presentation Slides (~1MB)
http://tinyurl.com/4n4pzkm (amsat.org)

ARISSat-1/KEDR Dayton Presentation Slides
http://tinyurl.com/6zrfmzv (amsat.org)

Follow ARISSat-1/KEDR on Twitter:
http://twitter.com/#!/arissat1
In USA you can also text 'follow Arissat1' to 40404 with your
cell phone. (leave off the quotes).

More information on the transmission schedule and overall mission
of ARISSat-1/KEDR can be found at:

ARISSat-1/KEDR Web site: http://www.arissat1.org
AMSAT Web site: http://www.amsat.org
ARISS Web site: http://www.ariss.org
ARISS Facebook Page: Amateur Radio on the ISS (ARISS)
ARISS Twitter site: @ARISS_status

The Radio Amateur Satellite Corporation (AMSAT) is a non-profit,
volunteer organization which designs, builds and operates experi-
mental amateur radio satellites and promotes space education. We
work in partnership with government, industry, educational insti-
tutions and fellow amateur radio societies. We encourage technical
and scientific innovation, and promote the training and development

of skilled satellite and ground system designers and operators. Our vision is to deploy satellite systems with the goal of providing wide area and continuous coverage for amateur radio operators world-wide. AMSAT is also an active participant in human space missions and supports satellites developed in cooperation with the educational community and other amateur satellite groups.

Amateur Radio on the International Space Station (ARISS) is a volun-teer program which inspires students, worldwide, to pursue careers in science, technology, engineering and math through amateur radio communications opportunities with the International Space Station on-orbit crew. Students learn about life on board the ISS and explore Earth from space through science and math activities. ARISS provides opportunities for the school community (students, teachers, families and local residents) to become more aware of the substantial benefits of human space flight and the exploration and discovery that occur on space flight journeys along with learning about technology and amateur radio.

[ANS thanks the ARISSat-1/KEDR Team for the above information]

/EX

SB SAT @ AMSAT $ANS-212.02
Radio-to-Soundcard Interface For Access to ARISSat-1/KEDR Bandwidth

AMSAT News Service Bulletin 212.02
>From AMSAT HQ SILVER SPRING, MD.
July 31, 2011
To All RADIO AMATEURS
BID: $ANS-212.02

The ARISSat-1/KEDR FM downlink on 145.950 MHz will be audible on all common 2 meter amateur radio receivers with no modification needed to your equipment. A CW/SSB receiver will also receive the CW beacons on 145.919 MHz or 145.939 MHz and the signals on the linear transponder passband between 145.922 to 145.938 MHz.

To take advantage of the full bandwidth of the downlink for SSTV, CW Decoding, BPSK Decoding you'll need to add a few things:

+ You'll need an audio patch cable from your receiver to your computer soundcard audio input. If you are already on the air with other amateur radio soundcard applications then you are ready with the hardware to receive, decode, and display the SSTV, BPSK-1000 or BPSK-400 downlinks.

+ You'll need SSTV software (refer to the SSTV news item)

+ You'll need the ARISSatTLM software to decode the BPSK telemetry. (refer to the ARISSatTLM news item)

The key difference is that the SSTV signal is transmitted on the FM downlink on 145.950 MHz. The BPSK-1000 downlink is transmitted

in SSB mode on 145.920 MHz. Depending on your equipment you may need to fabricate an audio patch to the computer soundcard input from both your 2 meter FM radio and 2 meter SSB radio.

An initial "RECEIVE ONLY" configuration is easily done consisting of an audio patch cable between your radio and the soundcard. The ARISSat-1/KEDR team testing the software noted that a minimal set up consisting of an audio cable from the speaker or headphone output from the radio to the line (or mic) input on your PC sound card was successful. If your rig has a 'Line Out' audio connection this can be run to the soundcard 'Line In' connection.

Many amateur radio "digital modes" articles, web pages, and books also discuss the more complex requirements to interface your transmitter to the soundcard and to control the push-to-talk functions. This is NOT required for you to successfully receive, decode, and display the signals you receive from ARISSat-1/KEDR. To join into the all the fun your "RECEIVE ONLY" configuration will just need the audio cable!

[ANS thanks the ARISSat-1/KEDR Team for the above information]

/EX

SB SAT @ AMSAT $ANS-212.03
Get Ready for ARISSat-1/KEDR BPSK-1000 Telemetry

AMSAT News Service Bulletin 212.03
>From AMSAT HQ SILVER SPRING, MD.
July 31, 2011
To All RADIO AMATEURS
BID: $ANS-212.03

The BPSK transmission from ARISSat-1/KEDR will feature a new 1kBPSK protocol developed by Phil Karn, KA9Q to be readable in low signal level conditions. The BPSK data will transmit satellite telemetry and data from the Kursk experiment.

You'll need to take a few steps to get your station set up to receive, decode, and display the BPSK-1000 telemetry data:

1. You need a 2 meter SSB receiver.

2. An audio patch cable between your receiver and computer's soundcard is required.

3. Download the ARISSatTLM ground station soundcard demodulator and display software.

Windows:
http://www.arissattlm.org/download/ARISSatTLM_050_Setup.exe

MAC:
http://www.arissattlm.org/download/ARISSATTLM.zip

The ARISSatTLM Software Quick Start Guide is available:
http://tinyurl.com/42uhtyf (amsat.org)

4. Follow the instructions in the ARISSatTLM Software Quick Start Guide to install the software.

The ARISSatTLM software can decode BPSK signals in two modes:

+ Playback and decode a recorded file (even if you do not have a 2 meter SSB receiver you can experiment with the software and test file to learn about telemetry decoding and display!)

+ Live, off-the-air capture

Playback and Decode a Recorded File

ARISSatTLM requires the recorded data to be in the WAV format. Compression formats such as MP3 are not suitable and will not decode and display correctly. Although .WAV files are notably large, usually several megabytes, they capture all of the bits of the signal. Compressed file formats sound OK to the human ear but save file space by eliminating bits from the recorded stream. You need to capture and record as many of the downlink bits as possible. An occasional noise burst or momentary fade is handled by the Forward Error Correction capability of the ARISSatTLM software.

Download the BPSK Test File

A link to a BPSK test file suitable for operation with the current release of ARISSatTLM software will be released soon to http://www.arissattlm.org.

NOTE: Some earlier BPSK test recordings that are on the internet will not work because they were created with earlier versions of the satellite's onboard software (the satellite software and ARISSatTLM are a "matched pair").

1. Start the ARISSatTLM program on your computer.

2. Click the start button in the lower left of the Tuning Indicator window.

3. In the ARISSatTLM Version 0.50 Window select:
File --> Open WAVE file.
Select the ARISSatTLM test file you previously downloaded.

4. The Tuning Indicator window will show the "CW Bump" at proper location (note the "Put CW signal here" indicator).

5. The Morse Code Decoder will decode and stream the CW message.

6. The ARISSatTLM Telemetry as Text window will decode and display data.

7. The ARISSatTLM window will display the received data
as received.

8. The display will stop when the end of file is reached.

Live Off The Air Telemetry Capture and Display

The ARISSat-1 BPSK-1000 downlink is transmitted in SSB mode on
145.920 MHz. When the CW2 beacon on 145.919 MHz is active this
indicates that the BPSK-1000 format is being transmitted. If the
CW1 beacon on 145.939 MHz is active this indicates the backup of
BPSK-400 format is being transmitted.

Transmitting at 100 mW, both BPSK rates include Forward Error
Correction (FEC) and it is expected that modest quarter-wave
antennas with low-loss coaxial cable will provide sufficient
signal strength for decoding and display by the ARISSatTLM
software.

BPSK-1000 sounds like a "shusssch" with a higher pitch than the
400 bps growl. It is difficult to tune by ear. The BPSK beacon
is centered 1 kHz above the CW2 beacon so that the CW beacon sits
in the lower spectral null of the BPSK signal, i.e., in a narrow
spot where there's no BPSK signal power.

If you put your receiver in USB mode and tune the CW beacon so
it comes out at an audio frequency of 500 Hz, this will automa-
tically center the BPSK signal in a conventional SSB filter
extending from 300-2700 Hz. The Tuning Indicator window helps
you tune the signal correctly.

Follow the recommendations in the ARISSatTLM Quick Start Guide
for tuning and decoding the BPSK telemetry data. Once you are
tuned in correctly (and adjust for doppler shift) you will be
able to decode the BPSK-1000 signal. You will also be able to
copy the CW2 beacon text in the Morse Code Decoder window.

AMSAT needs your telemetry from ARISSat-1/KEDR. Since there are no
"Whole Orbit Data" storage mechanisms onboard ARISSat-1/KEDR, your
submissions are the only way for AMSAT to collect the spacecraft
telemetry and KURSK experiment results.

+ The telemetry may be recorded using the FunCube dongle or SDR-IQ
receivers. After decoding the recorded file ARISSat-1/KEDR and
Kursk telemetry CSV files (in the ARISSatTLM folder) can be sent
as an e-mail attachment to telemetry@arissattlm.org

+ If you are running ARISSatTLM and receiving the signal "live"
from ARISSat-1/KEDR, please enable the telemetry forwarding option.

+ The latest telemetry can be seen LIVE on your computer or cell
phone at: http://www.arissattlm.org/mobile

[ANS thanks the ARISSat-1/KEDR Team for the above information]

/EX

SB SAT @ AMSAT $ANS-212.04
Get Ready for ARISSat-1/KEDR SSTV Reception

AMSAT News Service Bulletin 212.04
>From AMSAT HQ SILVER SPRING, MD.
July 31, 2011
To All RADIO AMATEURS
BID: $ANS-212.04

The ARISSat-1 FM downlink on 145.950 MHz includes live SSTV images as part of the cycling voice ID, select spoken telemetry values, and the international greeting messages. Here are some pointers to help you get your station ready to receive and display the SSTV pictures transmitted by ARISSat-1.

One fun feature is that there are four SSTV cameras mounted on the spacecraft. On photos of ARISSat-1 you may have noticed black brackets on the outside of the spacecraft. These hold the mirrors that reflect the light onto the lens of the cameras. The software-defined-transponder will use the image data from the cameras to generate the SSTV downlink.

ARISSat's software will sequentially select a new or stored image from one the four cameras. There are two pre-recorded images as part of the sequence. The camera that took the the picture can be identified by the color of the call sign in the upper left of the SSTV image. The SSTV image will be sent down as FM audio SSTV in Robot 36 format on 145.950 MHz about every 140 seconds.

The RF downlink power on the 145.950 MHz FM downlink will be 250mW which is predicted to provide a link margin around 6 dB on an HT with a 'big whip' when the satellite is at 15 degrees elevation. This should be sufficient to receive SSTV pictures although you may need to orient the whip to line up the antenna polarization.

ARISSat-1 is not stabilized so the antenna orientation is unpredictable and a certain amount of fading will happen. The receiving link margin may be improved with a handheld beam such as an "Arrow", "Elk", or "Cheap Yagi" antenna.
(See: http://www.wa5vjb.com/references/Cheap%20Antennas-LEOs.pdf)

See the news bulletin regarding tips and pointers for the audio interface between your radio and your computer's sound card. When running your SSTV software just adjust the sound card audio gain slider and/or radio volume control so that the SSTV signal is within the center part of the bar. MMSSTV will give you an "overflow" indication if the volume is too high.

SSTV Software Download Sites

There are many amateur radio SSTV software decoding applications available. One of the easiest to use on Windows computers is the

MMSSTV program. This can be downloaded from:
http://mmhamsoft.amateur-radio.ca/pages/mmsstv.php

The Ham Radio Deluxe software package also includes SSTV operation.

SSTV software for the Mac is available at:
http://web.me.com/kd6cji/MacSSTV/MultiScan.html

If you successfully receive the SSTV transmissions, you are invited
to upload your picture to to the ARISS SSTV Gallery:
http://www.amsat.org/amsat/ariss/SSTV/

[ANS thanks the ARISSat-1 Team for the above information]

/EX

SB SAT @ AMSAT $ANS-212.05
N7HPR Blog in EE Times Magazine Documents ARISSat-1/KEDR Development

AMSAT News Service Bulletin 212.05
>From AMSAT HQ SILVER SPRING, MD.
July 31, 2011
To All RADIO AMATEURS
BID: $ANS-212.05

Steve Bible, N7HPR shares his tale of how amateur radio lead to his
opportunities in his professional life as an engineer at Microchip
Technology, And, as Steve says, "Eventually becoming one of the most
interesting projects I've ever worked on."

Steve continues, "Over the next several weeks, this limited-series
guest blog will relate the story of how my colleagues and I came to
build an amateur satellite, the challenges we ran into while doing
so and, hopefully, its successful deployment from the International
Space Station."

In this blog, Steve hopes to recount the highlights from that journey
and tell you about some of the technical as well as personal trials
and tribulations. How does a diverse group of folks, from all walks
of life, interests and professions, create an amateur satellite to be
deployed on the ISS? Tune in and see!

Follow Steve's Blog on the EE Times website, http://www.eetimes.com,
then follow the EE Life -> Blogs link for future installments.

The article can be found on-line at:
http://tinyurl.com/3lddtou (eetimes.com)

[ANS thanks EE Times and Steve Bible, N7HPR for the above information]

/EX

SB SAT @ AMSAT $ANS-212.06
View Student Projects Flying on ARISSat-1/KEDR

AMSAT News Service Bulletin 212.06
>From AMSAT HQ SILVER SPRING, MD.
July 31, 2011
To All RADIO AMATEURS
BID: $ANS-212.06

ARISSat-1/KEDR will carry many education-based features encouraging student interaction. During the development of the satellite, students from around the world were invited to submit images and letters documenting their participation in science activities and projects.

These submissions have been processed and stored on a memory chip that has been attached to ARISSat-1/KEDR and is flying along with the craft as it orbits the Earth. The student projects and photos can all be viewed ARISS Europe web site at:
http://www.ariss-eu.org/arissat-1.htm

[ANS thanks ARISS-Europe for the above information]

/EX

SB SAT @ AMSAT $ANS-212.07
FUNcube Vibration Testing Videos

AMSAT News Service Bulletin 212.07
>From AMSAT HQ SILVER SPRING, MD.
July 31, 2011
To All RADIO AMATEURS
BID: $ANS-212.07

AMSAT-UK has released two videos showing vibration testing of the FUNcube satellite.

This video shows the general layout of the RAL vibration testing facility, and includes interviews with Graham and David at the conclusion of our testing: http://vimeo.com/26951186

This is a short video showing what happens during a 'high sine' test. The test is being performed in the Z axis. Hold your breath!!
http://vimeo.com/26954073

AMSAT-UK photos of the testing can be viewed at:
http://www.uk.amsat.org/archives/funcube-enviromental-testing-at-ral

An additional news article can be read at the Southgate Amateur Radio News site at:
http://www.southgatearc.org/news/july2011/funcube_videos.htm

[ANS thanks Trevor, M5AKA for the above information]

/EX

SB SAT @ AMSAT $ANS-212.08
Satellite Shorts From All Over

AMSAT News Service Bulletin 212.08
>From AMSAT HQ SILVER SPRING, MD.
July 31, 2011
To All RADIO AMATEURS
BID: $ANS-212.08

+ Clint Bradford, K6LCS will be talking about ARISSat-1/KEDR and Working the FM Ham Satellites on August 2 at 6PM PDT during the recording session of the Ham Nation video podcast - the "Bob Heil and Gordon West" show in Leo LaPorte's TWIT.tv network. They'll also remind viewers to support AMSAT and endeavours like ARISSat-1.
http://twit.tv - click on LIVE 6PM PDT August 2, or
http://twit.tv/hn - to watch all Ham Nation episodes

+ Clint Bradford, K6LCS, will step out of the recording studio to present his 'Working Amateur Satellites With Your HT' session in Perris, CA on August 4 and in Rialto, CA on August 20. ALL are welcome to attend these club meetings!
Thursday, August 4 - 6:30PM
Lake Perris Event Center - Lot 9
17801 Lake Perris Drive, Perris CA 92571

Saturday, August 20, 2011 - 10:00AM
Rialto Fire Department - Station 201
131 S Willow Avenue, Rialto CA 92376

Attendees should download Clint's four-page tutorial and radio programming data from http://www.work-sat.com
Clint welcomes pre-presentation questions. Call him at 909-1241-7666, or send email to . clint@clintbradford.com

+ Bob, KC2WYH invites you to be on the lookout for the Roseland Amateur Radio Club, K2GQ, operating from the "National Night Out" on Tuesday, August 2nd in Livingston, New Jersey with various ham radio demonstrations. There is a high elevation pass by AO-51 at 2026-Z (4:26 p.m. EDT) within range of the special event.

+ Look for Makoto, JI5RPT to be active as JD1BLY from Chichijima Island (IOTA AS-031) Ogasawara. Operation is planned for 40m to 6m and Satellite CW/SSB/DIGI between August 1-7. QSL via JI5RPT. Web based log will be found at: http://www.ji5rpt.com/jd1/ and you are also invited to monitor Twitter: http://twitter.com/jd1bly (ji5rpt@jarl.com)

+ Heads up this August 5-7: Be sure to look for W1AW/5 operating on all available satellites from Taos, New Mexico during the 2011 ARRL Rocky Mountain Division Convention. http://www.2011convention.org. More information can also be found on Ollie's AB1JO QRZ page: http://www.qrz.com/db/aj1o/

+ Look for John, VA3BL operating from the Trent Severn Waterway in grid FN04 + FN14 in Ontario, Canada, August 1-7 with the arrow and HT. He Will try to be on AO-51, SO- 50 and any other FM satellites that are

available.

+ ZB2, GIBRALTAR Astronaut Edmondo,VA3ITA/IW0GVP, will be QRV as
ZB2/VA3ITA from the Rock of Gibraltar from Aug 8-11. Activity
will take place on CW, SSB, digital modes and via satellites.
Edmondo is also willing to make skeds. More information and his
e-mail address can be found on QRZ.com. QSL via VA3ITA.
(DXNL 1738 - Jul 27, 2011 DX Newsletter

+ On Saturday July 23, 2011 at 09:45 UTC, ESA Space Camp 2011, San
Rossore Park, Pisa, Italy established a direct ARISS (Amateur Radio
on the International Space Station) contact with NASA astronaut
Michael E. Fossum KF5AQG onboard the International Space Station.
Astronaut Fossum operated with the ISS callsign OR4ISS. The ESA Space
Camp 2011 operated the contact with ARI "Versilia" club station call
sign IQ5VR. The event can seen in an ESA video at:
http://tinyurl.com/3esggh7 (livestream.com)
Additional coverage of the event is provided by Southgate News Site:
http://www.southgatearc.org/news/july2011/ariss_event_success_2307.htm

+ We wish we could have an antenna like this! But this one is in space:
A newly-launched Russian radio telescope successfully unfurled a
10-meter dish-shaped reflector overcoming one of the biggest risks on
the observatory's ambitious mission to see inside black holes and view
other cosmic phenomena. Read about the details at:
http://spaceflightnow.com/news/n1107/25spektr/

+ A great 10 minute video is available about Vietnam's Cubesat F-1
http://www.youtube.com/watch?v=iAAWE1PDuAM

+ Jan, ON7UX posted the AMSAT-ON video report about OUFTI-1 the D-STAR
CubeSat on YouTube http://www.youtube.com/watch?v=UXmqYy_Q_Wg

+ The August, 2011 On-Line Edition of the WorldRadio Magazine (CQ
Publications) mentions Peter's efforts on behalf of AMSAT in regards
to HR607. The free magazine is a huge PDF file:
http://worldradiomagazine.com/wro_issues/2011/WRO_08_2011.pdf
The Satellites column begins on Page 24 of this issue. They also pro-
vide good coverage of the other ANS bulletin items we've issued.

+ Information about a CubeSat under development at University of Puerto
Rico in Mayaguez (UPRM) can be found on-line in their blog at:
http://cubesatuprm.wordpress.com/ A video of the student project
is posted at: http://www.youtube.com/watch?v=YN5rM5Dxs-k (Spanish)

+ Photos of satellite operation taken by Dave KB5WIA during his
camping trip to Eagle Lake in Lassen National Forest, which is
in Northern California and grid CN90 can be viewed at:
http://tinyurl.com/3edhgas (kb5wia.blogspot.com)

+ Shamai Opfer 4Z1WS gave a talk on Israel's new 3U CubeSat InKlajn-1
to the AMSAT-UK International Space Colloquium. It is planned to
provide telemetry using 1200bps BPSK and 1200bps AFSK with an option

of 400bps BPSK and 1200bps MSK. Downlink frequencies of 145.815 MHz and 145.950 MHz have been coordinated by the IARU Satellite Frequency Coordination panel. More news and a video of the ejection tests can be seen at: http://www.southgatearc.org/news/july2011/inklajn_1.htm

+ The next dates for the Hudson Valley Satcom net are August 4, August 18, and September 1 at 8:00 PM Eastern Daylight Time (UTC - 4). You can tune in via the 146.970 MHz Mt. Beacon repeater, PL 100.0 or via EchoLink on the N2EYH-L node. More info is available at: http://www.hvsatcom.org (Stu, WA2BSS)

[ANS thanks everyone for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office. And with that please keep in mind the ham who made a frantic phone call, "My wife is pregnant and her contractions are only two minutes apart!" "Is this her first child?" the doctor asked. "No!" the ham shouted, "This is her husband!"

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

104. Crossposting Permitted to rec.radio.amateur.moderated

Newsgroup: rec.radio.amateur.space
Date: 2011-08-01 06:00:03 UTC
From: rram@panix.com
Message-ID: <radio/ham-radio/moderated/crossposting-1-1312178401@panix.com>
Source record: 330
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.info

```
Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/moderated/crossposting
Revision: 1.1 2009/04/12 19:42:04
Posting-Frequency: posted monthly
URL: http://www.panix.com/~rram/usenet/rram/index.html

Changes followed by "|".

After a 30-day public discussion and feedback period to gauge reader
opinions in March of 2009:

http://groups.google.com/group/rec.radio.amateur.moderated/browse_thread/thread/d7d337db35
f23326

the rec.radio.amateur.moderated Moderation Team has decided to consider
amending its charter, and permit limited simultaneous crossposting to
rec.radio.amateur.moderated and one other unmoderated
amateur-radio-related discussion newsgroup. We are currently trying
this on a temporary basis (90 days, through early July 2009), and adopt
it permanently if successful.

Approved rec.radio.amateur.* newsgroups are those that are currently
listed in the latest version of the "List of Big Eight Newsgroups" which
is crossposted monthly to news.announce.newgroups, news.groups, and
news.lists.misc.

Approved alt.radio.amateur.* and alt.ham-radio.* newsgroups are those
that have been created consistent with the suggestions in "So You Want
to Create an Alt Newsgroup" at:

http://www.faqs.org/faqs/alt-creation-guide/

Approved regional hierarchy newsgroups are those that contain either
"radio.amateur" or "ham-radio" in their names, including
uk.radio.amateur and aus.radio.amateur.misc.

We will make every reasonable effort to keep our list of approved
newsgroups up-to-date. In case we have overlooked any, and a submission
is rejected in error as a result, the rejected submitter can E-mail us
at our administrative contact address (in the signature at the bottom of
this article, and the default Reply-To for the rejection message)
requesting that it be added, and that the article be approved. We may
still choose to reject articles crossposted to any alt.* newsgroup with
an inappropriate name, including obscene language, embedded
name-calling, or encouragement of unlawful conduct.
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Please direct any comments, questions, or criticisms to
rec-radio-amateur-moderated-request@panix.com.

105. Weekly Highlights of Solar and Geomagnetic Activity, 25 - 31 July 2011

Newsgroup: rec.radio.amateur.space
Date: 2011-08-02 21:30:07 UTC
From: SWPC.Webmaster@noaa.gov
Message-ID: <20110802213001.DC01533C7D@panix2.panix.com>
Source record: 331
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.info

```
:Product: Weekly Highlights and Forecasts
:Issued: 2011 Aug 02 2058 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
# Weekly Highlights and Forecasts
#
Highlights of Solar and Geomagnetic Activity
25 - 31 July 2011

Solar activity ranged from very low to high levels during the
period. The period began with very low activity during 25 July, with
B-class flares predominantly from Region 1260 (N19, L=358,
class/area Ehi/330 on 30 July). Activity increased to low levels on
26 July with two C-class flares from Region 1260. Activity increased
to moderate levels on 27 July due to an M1/1n flare at 27/1607 UTC,
as well as frequent to occasional low-level C-class flares, from
Region 1260. Activity decreased to low levels during 28 - 29 July
with 13 C-class flares on each of those days. The largest during
this period was a C6/1f at 29/1640 UTC from Region 1261 (N16, L=330,
class/area Eki/350 on 31 July). Activity increased to high levels on
30 July due to an impulsive M9 flare from Region 1261 at 20/0209
UTC. A 180 sfu Tenflare was associated with this flare. Low levels
returned on 31 July with several C-class events, the largest of
which was a C3/Sn at 31/0254 UTC from Region 1261.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at
normal to high levels during 25 - 26 July. Flux increased to
moderate to high levels during 27 - 29 July. Flux decreased to
normal to moderate levels on 30 - 31 July.

Geomagnetic field activity ranged from quiet to minor storm levels
during the period. Activity began the period at quiet to unsettled
levels, with isolated active to minor storm levels at high latitudes
on 25 July, due to a coronal hole high-speed stream (CH HSS).
Activity decreased to mostly quiet to unsettled levels on 26 July.
Activity decreased to mostly quiet levels during 27 - 29 July.
Activity increased to quiet to active levels with an isolated minor
storm period at high latitudes during 30 July. Mostly unsettled
conditions were observed on 31 July.
```

Forecast of Solar and Geomagnetic Activity
03 August - 29 August 2011

Solar activity is expected to be at low to moderate levels during 03 - 08 August, with a chance for M-class flares greater than M5 from Region 1261. Activity is expected to decrease to very low to low levels during the rest of the period as Region 1261 departs. A chance for M-class activity increases on 20 August when Region 1261 rotates back around the east limb.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at moderate to high levels on 03 - 04 August. Normal to moderate levels are expected during 05 - 07 August. Moderate to high levels are expected during 08 - 13 August due to effects from a recurrent CH HSS. Normal to moderate levels are expected on 14 - 15 August followed by moderate to high levels from 16 - 25 August due to a second CH HSS. Normal to moderate levels are expected for the remainder of the period.

Geomagnetic field activity is expected to be predominantly quiet during 03 - 04 August. A CME observed at approximately 02/0706 UTC on LASCO C3 imagery is expected to arrive late on 04 August and increase activity to unsettled to active levels with a chance for minor storm conditions through the first few periods of 06 August. Major storm periods are possible at high latitudes during this time. Quiet to unsettled conditions are expected for the rest of 06 August through 11 August due to effects from a recurrent CH HSS. Activity is expected to decrease to mostly quiet levels from 12 - 13 August as the CH HSS effects subside. Activity is expected to increase to quiet to unsettled levels from 14 - 22 August, with a chance for active levels on 15 - 17 August due to another recurrent CH HSS. Conditions are expected to decrease to quiet levels until the arrival of a third CH HSS anticipated to become geoeffective on 26 August. Quiet to unsettled conditions with a chance for isolated active periods are expected to prevail for the remainder of the forecast period.

106. ANS-219 AMSAT News Service Weekly Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2011-08-07 13:04:40 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <000a01cc5502$8bbdf780$a339e680$@net>
Source record: 332
Cross-posted to: rec.radio.amateur.space,rec.radio.info

AMSAT NEWS SERVICE
ANS-219

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:
* AMSAT-NA On-Orbit Again with ARISSat-1
* NASA Education Express Message - ARISSat-1/KEDR Deployment
* ARISSat-1/KEDR Deployed on August 3 - Signals Received
* ARISSat-1/KEDR Reception Report Certificates
* AMSAT-UK Issues ARISSat-1/KEDR BPSK Reception Challenge
* AMSAT History: 40th Anniversary of First Synchronous Satellite Proposal
* ARISS Status - 1 August 2011

SB SAT @ AMSAT $ANS-219.01
AMSAT-NA On-Orbit Again with ARISSat-1

AMSAT News Service Bulletin 219.01
From AMSAT HQ SILVER SPRING, MD.
August 7, 2011
To All RADIO AMATEURS
BID: $ANS-219.01

AMSAT President Barry Baines, WD4ASW, observed, "Welcome to a new era as AMSAT returns to space with ARISSat-1/KEDR. I encourage all hams, SWLs, educators, and experimenters to enjoy the unique opportunity presented by this mission to learn about amateur radio in space, enhance and improve your station, and hone your operating skills as you try out all of this satellite's features."

Barry continues, "ARISSat-1/KEDR marks a new type of satellite which has captured the attention of the national space agencies around the world for the unique educational opportunity we have been able to design, launch, and now operate. By designing an educational mission aligned with NASA's Science, Technology, Engineering, and Mathematics goals amateur radio operators around the world can now enjoy a new satellite in orbit."

ARISSat-1/KEDR Project Manager, Gould Smith, WA4SXM said, "Dozens of amateur radio volunteers, AMSAT, ARRL, NASA, and Energia have teamed up for this successful mission to bring you the most unique and innovative amateur radio satellite mission flying 220 miles above your QTH at 17,500 mph! Congratulations to all who made ARISSat-1 successful!"

Continuing, Gould said, "ARRISat-1/KEDR has been developed, built, and tested by a remarkable team of radio amateurs. As the Project Manager for ARISSat-1/KEDR these past three years I have had the opportunity to work with these creative people to get to where we are now ... IN ORBIT!"

Watch the video of ARISSat-1/KEDR Project Manager Gould Smith WA4SXM's interview on WBIR TV about the new Amateur Radio satelite ARISSat-1 which 'takes distance learning to new heights': http://tinyurl.com/3fc8f9n (Soutgate ARC News)

ARISSat-1 Project Web Page: http://www.arissat1.org
ARISSat-1 Operational News: http://www.amsat.org
How to receive ARISSat-1:
http://www.amsat.org/amsat-new/ARISSat/ARISSatHowTo.php

[ANS thanks AMSAT President Barry Baines, WD4ASW and ARISSat-1/KEDR Project Manager, Gould Smith, WA4SXM for the above information]

/EX

SB SAT @ AMSAT $ANS-219.02
NASA Education Express Message - ARISSat-1/KEDR Deployment

AMSAT News Service Bulletin 219.02
From AMSAT HQ SILVER SPRING, MD.
August 7, 2011
To All RADIO AMATEURS
BID: $ANS-219.02

The NASA Education Office posted news of the ARISSat-1/KEDR deployment in their August 4 Education EXPRESS message. The Express message below was sent to 18,516 EXPRESS subscribers and to 1,285,892 NASA Twitter account subscribers. Using social media services to expand the range for NASA education messages has increased the total audience to approximately 1,304,408 people. (Yes, that's 1.3 million people).

[NASA EXPRESS Message follows]

ARISSat-1 Satellite Launched

A satellite with amateur radio capabilities and a student-designed experiment was released into orbit around Earth on Aug. 3, 2011, during a spacewalk outside the International Space Station. The satellite is transmitting signals containing information that students around the world can access.

ARISSat-1, which stands for Amateur Radio on the International Space Station Satellite-1, contains a student-designed experiment and other equipment that students can use to learn more about space and space exploration. The rectangular spacecraft is covered by six solar panels that will charge the batteries in the satellite for about six months as it orbits Earth. Spoken telemetry values, with data such as temperature and battery life, are intended to promote science and mathematics education by encouraging school children to listen to the satellite, track its progress and plot the changes.

The project website provides free downloadable software that can be used to decode the data. In addition to data, the satellite will transmit 24 pre-recorded greetings in 15 different languages -- French, Spanish, German, English and Chinese, to name a few.

Check out the ARISSat-1 website at http://arissat1.org/ for information on data transmissions, contests and student activities.

Questions about ARISSat-1 should be directed to teachers@arissat1.org.

NASA Education listserv: http://www.nasa.gov/education/express
NASA Twitter: http://twitter.com/nasa
NASA Blogs: http://blogs.nasa.gov/cm/newui/blog/blogs.jsp
NASA Education Express Blog:
http://blogs.nasa.gov/cm/blog/educationexpress

[ANS thanks AMSAT President Barry Baines, WD4ASW for forwarding this news to the AMSAT News Service]

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SB SAT @ AMSAT $ANS-219.03
ARISSat-1/KEDR Deployed on August 3 - Signals Received

AMSAT News Service Bulletin 219.03
From AMSAT HQ SILVER SPRING, MD.
August 7, 2011
To All RADIO AMATEURS
BID: $ANS-219.03

ARISSat-1/KEDR was deployed from the ISS during EVA-29 on Wednesday, August 3 by Cosmonaut/Flight Engineers Sergei Volkov and Alexander Samokutyaev. First reported signals were received by JR8LWY with copy of the telemetry beacon as the satellite passed over Japan.

Full operational capability of ARISSat-1/KEDR was quickly confirmed after initial concern of a missing or damaged 70cm receiver antenna on the satellite.

145.950 MHz FM Downlink - OPERATIONAL

FM transmissions will cycle between a voice ID as RS01S, select telemetry values, 24 international greeting messages in 15 languages and SSTV images. One of the messages will be a conversation between Yuri Gagarin and ground control.

If you successfully receive the SSTV transmissions, you are invited
to upload your picture to to the ARISS SSTV Gallery:
http://www.amsat.org/amsat/ariss/SSTV/

435 MHz - 145 MHz Linear Transponder - OPERATIONAL

The linear transponder operates in Mode U/V (70 cm Up, 2m Down).
It is an 16 KHz wide inverting passband and the convention will be
to TX LSB on the 435 MHz uplink and RX USB on the 145 MHz downlink.

The full status of the 70cm antenna is unknown however reports of
contacts and full uplink-downlink operation are being received:

+ Drew, KO4MA reported on August 4, "I was able to hear myself with
as little as 1 watt on the 0425Z pass". This equates to an EIRP
of as little as 26 watts which can be easily produced by even modest
satellite stations. Audio with a picture were
posted at: http://www.youtube.com/watch?v=0AFyZNAbOeA

+ John, K8YSE reported completing an unscheduled contact with KD8CAO
on August 5 at 1125z. Signals were weak but readable.

+ Masa, JN1GKZ reported from Tokyo receiving his downlink signal
during an eclipse pass on August 5, 1233-1240z with a clear and
loud downlink though the elevation was less then 5 degrees.

145.919 MHz CW Beacons - OPERATIONAL

The CW transmissions will be callsign ID RS01S, select telemetry,
and callsigns of people actively involved with the ARISS program.

145.920 MHz SSB BPSK-1000 Telemetry - OPERATIONAL

AMSAT needs your telemetry from ARISSat-1/KEDR. Since there are no
"Whole Orbit Data" storage mechanisms onboard ARISSat-1/KEDR, your
submissions are the only way for AMSAT to collect the spacecraft
telemetry and KURSK experiment results.

+ Recorded file ARISSat-1/KEDR and Kursk telemetry CSV files (in the
ARISSatTLM folder) can be sent as an e-mail attachment to:
telemetry@arissattlm.org

+ If you are running ARISSatTLM and receiving the signal "live"
from ARISSat-1/KEDR, please enable the telemetry forwarding option.

+ The latest telemetry can be seen LIVE on your computer or cell
phone at: http://www.arissattlm.org/mobile

[ANS thanks the ARISSat-1/KEDR Team for the above information]

/EX

SB SAT @ AMSAT $ANS-219.04
ARISSat-1/KEDR Reception Report Certificates

AMSAT News Service Bulletin 219.04
From AMSAT HQ SILVER SPRING, MD.
August 7, 2011
To All RADIO AMATEURS
BID: $ANS-219.04

When you receive the downlink signal from ARISSat-1/KEDR you are invited to send your report to the following e-mail boxes. You will receive a PDF certificate by e-mail.

Students and school groups are especially welcome! We look forward to your report!

Your report must contain the following information:

1) The signal you received:
a) the secret word*,
b) an SSTV image, or,
c) telemetry data

2) Your name or group name

3) The date/time of reception

4) Your e-mail address of where to send your certificate. You will receive a PDF certificate via email.

Here are the e-mail boxes to send your reports:

Secret word* contest to: secretword@arissat1.org
SSTV image to: sstvreport@arissat1.org
Telemetry data to: tlmreport@arissat1.org
(either digital or voice report of the data you received)

Received BPSK telemetry and .CSV files should continue to be sent to: telemetry@arissattlm.org.

* Those who do hear the secret word or call sign please do not put it out to the world. That would ruin the contest for those still waiting for their station to be in range.

You can find the details of the ARISSat-1/KEDR radio frequencies, links to telemetry decoding software and mission details on-line at:
+ http://www.amsat.org
+ http://arissat1.org

ARISSat-1/KEDR can be accessed on these frequencies:
+ 145.950 MHz FM Downlink
+ 435 MHz - 145 MHz Linear Transponder
+ 145.919 MHz CW Beacon
+ 145.920 MHz SSB BPSK-1000 Telemetry

The latest telemetry can be seen LIVE on your computer or cell phone at: http://www.arissattlm.org/mobile

TRACK STATUS on OSCAR STATUS PAGE

David Carr, KD5QGR has added ARISSat-1/KEDR to the list of satel-
lites at the popular "Live OSCAR Satellite Status Page" at:
http://oscar.dcarr.org/ You are invited to submit your reports
on this page.

[ANS thanks the ARISSat-1/KEDR Team for the above information]

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SB SAT @ AMSAT $ANS-219.05
AMSAT-UK Issues ARISSat-1/KEDR BPSK Reception Challenge

AMSAT News Service Bulletin 219.05
From AMSAT HQ SILVER SPRING, MD.
August 7, 2011
To All RADIO AMATEURS
BID: $ANS-219.05

ARISSat-1 was deployed from the ISS on August 3. It has a composite
VHF downlink that will easily fit into the FUNcube Dongle (FCD) re-
ceive spectrum. The 145.920 MHz telemetry is 1000 bps BPSK and can,
of course, also be received with a normal SSB 2 metre receiver.

The signal levels from ARISSat-1 should be similar to those we expect
from the AMSAT-UK FUNcube-1 satellite (and also eventually from UKube-1)
and the AMSAT-UK team are keen to discover what will be the minimum and
best type of antennas for schools to use with a FUNcube Dongle (FCD)
Software Defined Radio (SDR). Therefore user experience with the
ARISSat-1 signals will be very valuable in making this determination.

To encourage everyone to receive the 145.920 MHz BPSK ARISSat-1 tele-
metry signal AMSAT-UK are offering a FUN reward for listeners!

There are a number of categories for this challenge -they include:

+ The first FCD user, from each continent, who can post a spectrum
recording of the received signal together with evidence of decoding
the data using the ARISSatTLM software and of sending it to the
ARISSat data warehouse.

+ The first non-FCD user, from each continent, who can provide evidence
of having decoded the signals and of sending it to the ARISSat data
warehouse.

+ The listener, using a FCD or not, who can demonstrate satisfactory
reception of the telemetry in the same ways as described above, using
the "smallest" possible receive antenna. The actual closing date for
this part of the challenge will be announced later.

+ All other entrants who can demonstrate that they have been having FUN!

Please submit your "entries", including your location, station details
(including FCD serial number where applicable), postal address and

reports to: g0auk@amsat.org

[ANS thanks AMSAT-UK and Trevor, M5AKA for the above information]

/EX

SB SAT @ AMSAT $ANS-219.06
AMSAT History: 40th Anniversary of First Synchronous Satellite Proposal

AMSAT News Service Bulletin 219.06
From AMSAT HQ SILVER SPRING, MD.
August 7, 2011
To All RADIO AMATEURS
BID: $ANS-219.06

July 24 marked the 40th anniversary of AMSAT's original SYNCART proposal to NASA, in 1971, to fly a Synchronous Amateur Radio Transponder on NASA's Applications Technology Satellite ATS-G. NASA's response to our proposal appeared to be favorable, but unfortunately NASA cancelled the ATS-G mission.

The SYNCART proposal is on AMSAT-DL's web site at for those who would like to read it. It gives the justification why NASA should fly it for free, listing a number of amateur experiments and applications, most of which would still apply today.

The 1971 WARC on Space Technology was held around the same time (June 7 - July 17, 1971, in Geneva). That's the ITU conference that established the amateur-satellite service and allocated frequencies to it.

Several satellite manufacturers are now advertising that they host payloads aboard their satellite platforms. Think how it would transform amateur radio if we could get SYNCART packages aboard one or more of them!

Read a copy of the original proposal at:
http://www.amsat-dl.org/images/stories/satellites/syncart/sync.pdf

AMSAT-DL article (in German) at:
http://www.amsat-dl.org/index.php/news-mainmenu-97/185-syncart

[ANS thanks AMSAT Past President Perry Klein, W3PK for this information]

/EX

SB SAT @ AMSAT $ANS-219.07
ARISS Status - 1 August 2011

AMSAT News Service Bulletin 219.07
From AMSAT HQ SILVER SPRING, MD.
August 7, 2011
To All RADIO AMATEURS
BID: $ANS-219.07

1. Successful ARISS Contact with United Space School

On Saturday, July 30 a successful Amateur Radio on the International Space Station (ARISS) contact was held between students at United Space School in Seabrook, Texas and Mike Fossum, KF5AQG on the ISS. Station W6SRJ in California provided the connection. The United Space School is a once a year session of high school students that meets in the NASA/Clear Lake Area. Students come from around the world for a two week session, during which they stay with local host families while being mentored by astronauts, engineers, and scientists to design a mission to Mars as their team project. Class sessions are held at the University of Houston at Clear Lake. Students are given lessons on amateur radio and through the ARISS contact they learn firsthand what spaceflight is like. They will use this knowledge in their team project, which they will present to the Houston space community at the end of their session.

2. Astronaut Training Status

Mike Hopkins, KF5LJG is scheduled for an ARISS Basic Ops class on Monday, August 1. Hopkins is slated to fly with Expedition 37 in September 2013.

3. EE Times Runs ARISSat Blog

EE (Electronic Engineering) Times is running a blog called "Chips in Space - The Building of an Amateur Satellite" that will run over the next few weeks describing how the amateur radio satellite, ARISSat-1 was designed and built. The first entry has been posted: http://www.eetimes.com/electronics-blogs/chips-in-space/4218140/The-Building-of-an-Amateur-Satellite-1

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

107. Radio Meteor Obs. Bull. July 2011

Newsgroup: rec.radio.amateur.space
Date: 2011-08-07 19:47:43 UTC
From: Chris Steyaert <observations@rmob.org>
Message-ID: <urqt371d72g7s213g1eh8t7ejucsd8cejh@4ax.com>
Source record: 333
Cross-posted to: rec.radio.amateur.space,sci.astro.amateur

Radio Meteor Observation Bulletin No. 216 of July 2011 (76 K) is available now as

http://www.rmob.org/rmobtext/rmob1107.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

Chris

108. Weekly Highlights of Solar and Geomagnetic Activity, 01 - 07 August 2011

Newsgroup: rec.radio.amateur.space
Date: 2011-08-10 01:30:08 UTC
From: SWPC.Webmaster@noaa.gov
Message-ID: <20110810013002.7A35B33C8B@panix2.panix.com>
Source record: 334
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.info

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:Product: Weekly Highlights and Forecasts
:Issued: 2011 Aug 09 2323 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
# Weekly Highlights and Forecasts
#
Highlights of Solar and Geomagnetic Activity
01 - 07 August 2011

Solar activity ranged from very low to high levels during the
period. The period began with low activity on 31 July - 01 August,
with C-class flares predominantly from Regions 1261 (N15, L=332,
class/area Dai/380 on 04 August) and Region 1263 (N17, L=301,
class/area Ekc/720 on 04 August). Activity increased to moderate
levels on 02 August due to a long-duration M1/1n at 02/0619Z from
Region 1261, with associated Type IV, Type II (estimated speed of
1067 km/s), and Tenflare (220 sfu) radio emissions. LASCO C3 imagery
indicated a full halo coronal mass ejection with this flare.
Activity increased to high levels on 03 August with three M-class
flares. The largest of these was an M6/2b at 03/1348Z from Region
1261, with associated Type IV, Type II (estimated speed of 812
km/s). A CME was subsequently observed in STEREO-A Cor2 imagery at
03/1409Z. Solar activity remained at high levels on 04 August due to
an M9/2b from Region 1261 at 04/0357Z, with associated Type IV, Type
II (estimated speed of 750 km/s), and Tenflare (720 sfu). A CME was
also associated with the M9 flare with an approximate speed of 2100
km/s in STEREO-A COR-2 imagery. Activity decreased to low levels on
05 - 07 August, with C-class flares predominantly from Regions 1261,
1263, and 1267 (S17, L=243, class/area Bxo/010 on 05 August). A long
duration C1 flare was observed at 06/1807Z. Two CMEs were observed
by SOHO/LASCO C2 at 06/1036Z and 06/1736Z, but the majority of the
ejecta was directed to the west and not geoeffective. Late on 06
August, a recurrent positive polarity CH moved into a potentially
geoeffective position.

No proton events were observed at geosynchronous orbit during 31
July - 03 August. The 100 MeV proton flux at geosynchronous orbit
exceeded 1 pfu beginning at 04/0510Z, reaching maximum at 04/0740Z,
and ending at 04/1110Z. The maximum 100 MeV proton flux was 1.8 pfu.
The 10 MeV proton flux at geosynchronous orbit exceeded 10 MeV
beginning at 04/0635Z, reaching maximum of 96 pfu at 05/2150Z, and
ending at 06/0515Z. The 10 MeV proton flux remained enhanced, but
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below threshold and trailing towards quiet background on 07 August.

The greater than 2 MeV electron flux at geosynchronous orbit was at normal levels on 31 July. Fluxes increased from normal to moderate levels during 01 - 02 August. Flux values returned to moderate levels on 03 and 04 August. Normal to moderate levels were observed on 05 - 07 August.

Geomagnetic activity was quiet to unsettled, with isolated active levels on 31 July due to a coronal hole high-speed stream (CH HSS). Quiet to unsettled levels were observed on 01 August as the CH HSS subsided. Activity remained quiet on 02 - 03 August. Predominantly quiet levels were observed on 04 August, before the first of three CME shocks was observed transiting ACE at 04/2105Z, followed by a 20 nT sudden impulse observed by Earth based magnetometers at 04/2155Z. A magnetopause crossing was also observed by the GOES 13 and 15 satellites. Quiet to unsettled levels were observed between 04/2100 - 05/1800Z. Two additional shock passages were seen by ACE at 05/1722Z and 05/1834Z, accompanied by a noticeable increase in solar wind density, velocity and magnetic field, which included Bz fluctuation to -20 nT. Activity increased to minor to severe storms during 05/2100 - 06/0600Z due to effects from the CME shock arrivals. Early on 06 August, activity steadily declined from active to quiet levels, before the polarity transitioned to a mostly positive Phi angle and recurrent CH HSS effects began. This triggered an isolated minor storm at high latitudes between 06/1200-1500Z. Otherwise, geomagnetic activity remained mostly quiet for the remainder of 06 August and throughout 07 August.

Forecast of Solar and Geomagnetic Activity
10 August - 05 September 2011

Solar activity is likely to be at Moderate (R1 - Minor) during 10 August, with a chance for M-class flares from Region 1263. Activity is expected to decrease to very low to low levels during 11 - 17 August with the absence of mature spot groups on the disk. Activity is expected to increase to very low to low levels, with a chance for M-class flares from 18 August - 03 September from old regions; 1260 (N19, L=001), 1261 (N15, L=332), and 1263 (N17, L=301). Activity is expected to decrease to very low to low levels 04 - 05 September. However, there is a chance that new, rapidly emerging flux regions could increase activity to moderate or greater levels at any time during the outlook period.

The greater than 10 MeV Proton flux levels at geosynchronous orbit are likely to remain above threshold (S1 - Minor) on 10 August, as an event that is currently in progress carries over early into the period. No proton events are expected at geosychronous after 10 August though the end of the period.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at moderate to high levels on 10 and 11 August.

Normal to moderate levels are expected 12 - 15 August. Moderate to high levels are expected again 16 - 31 August. Normal to moderate levels are expected 01 - 03 September.

The geomagnetic field is expected to be at quiet to unsettled levels, with a chance for active levels 10 - 11 August, due to a CH HSS. Activity is expected to decrease to predominantly quiet levels during 12 - 15 August. Activity is expected to increase to quiet to unsettled levels, with a chance for active levels 16 - 18 August and again 21 - 22 August due to two recurrent CH High Speed Streams. Activity is expected to decrease to quiet to unsettled levels on 23 August CH HSS effects subside. Quiet levels are expected 23 - 25 August, before increasing to quiet to unsettled levels, with a chance for active levels at high latitudes 26 - 28 August due to another CH HSS. Mostly quiet conditions are again forecast to return from 29 August until 03 September, before another CH HSS ends out the period (04 - 05 September) with unsettled and active conditions.

109. Weekly Highlights of Solar and Geomagnetic Activity, 08 - 14 August 2011

Newsgroup: rec.radio.amateur.space
Date: 2011-08-16 21:30:05 UTC
From: SWPC.Webmaster@noaa.gov
Message-ID: <20110816213001.36CB433C7D@panix2.panix.com>
Source record: 335
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.info

```
:Product: Weekly Highlights and Forecasts
:Issued: 2011 Aug 16 1738 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
# Weekly Highlights and Forecasts
#
Highlights of Solar and Geomagnetic Activity
08 - 14 August 2011

Solar activity began the week at moderate levels with an M3/1b flare
at 08/1810 UTC from Region 1263 (N17, L=301, class/area Ekc/720 on
04 August). This event was associated with a type II radio sweep and
a partial-halo coronal mass ejection which was mostly directed away
from the west limb. Region 1263 produced an additional M2/1b flare
at 09/0354 UTC. Activity levels increased to high as Region1263
produced an X6/2b flare at 09/0805 UTC which was associated with
type II and type IV radio sweeps as well as a full halo CME, which
also appeared to be primary travelling away from the west limb.The
X6 is the largest x-ray event for cycle 24 so far. Activity levels
dropped down to low levels on 10 August as Region 1263 rotated
around the west limb. Activity levels further decreased to very low
levels on 12 August and remained there through the end of the
summary period.

A greater than 10 MeV proton enhancement was observed beginning at
08/1905 UTC in association with the M3 flare from Region 1263. The
enhancement peaked at 4 PFU at 08/2000 UTC. Greater than 100 MeV and
10 MeV proton events began on 09 August in association with the X6
flare described previously. The greater than 100 MeV proton event
began at 09/0825 UTC, reached a peak of 2.6 PFU at 09/0840 UTC, and
dropped below threshold at 09/1035 UTC. The greater than 10 MeV
proton event began at 09/0845 UTC, reached a peak of 26 PFU at
09/1210 UTC, and ended at 09/1715 UTC.

The greater than 2 MeV electron flux at geosynchronous orbit reached
high levels on 08 August and stayed high through the end of the day
on 13 August. The electron flux levels were at normal to moderate
levels on 14 August.

Geomagnetic field activity began the week at generally quiet to
unsettled levels with isolated active and minor storm periods at the
high latitudes. Activity decreased to quiet levels for 11-12 August
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and then increased slightly to quiet to unsettled levels for 14 August. Solar wind observations from the ACE spacecraft showed a positive polarity coronal hole high speed stream from 08-10 August. Solar wind data also indicated a solar sector boundary on the 13th at about 2000 UTC, followed by the onset of a negative polarity coronal hole high speed stream.

Forecast of Solar and Geomagnetic Activity
17 August - 12 September 2011

Solar activity is expected to be very low to low for 17-23 August. An increase to low to moderate is expected as old Region 1263 returns and transits the disk from 24 August to 06 September. Activity levels are likely to return to low or very low levels for the remainder of the outlook interval from 07-12 September. In addition there continues to be a chance that a new, rapidly emerging flux region could increase activity to moderate or greater levels at any time during the outlook period.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to increase to high levels for 18-23 August. Moderate levels are expected for 24-27 August, followed by a few days for high levels for 28-29 August. Low to moderate levels should prevail for 30 August through 04 September, followed by another increase to high levels for 05-07 September. Normal levels should resume on 08 September and continue through the end of the outlook period.

Geomagnetic field activity is expected to be generally quiet to unsettled for 17-22 August as there may be weak driving from a coronal hole high speed stream (HSS). Quiet levels should prevail for 23-25 August and another increase to quiet to unsettled is expected for 26-28 August from another HSS. Quiet levels are expected to return for 29 August through 02 September. An increase to unsettled with a chance for active periods is expected for 03-05 September due to another recurrent HSS. Quiet levels should predominate for 06-10 September, and another increase to quiet to unsettled from a recurrent HSS is expected for 11-12 September.

110. WORLD BEST SEXY PICS

Newsgroup: rec.radio.amateur.space
Date: 2011-08-18 07:54:15 UTC
From: devi <satyamsivam9030@gmail.com>
Message-ID: <650c62aa-bc56-46cd-8dea-9456df020cf3@d8g2000prf.googlegroups.com>
Source record: 336

FOR GOOD JOBS SITES TO YOU
http://goodjobssites.blogspot.com/

FOR HOT PHOTO&VIDEOS
HOT SOUTH ACTRESS IN DIFFERENT DRESSES
http://southactresstou.blogspot.com/2011/08/south-actress.html
TRISHA HOT BATHROOM PHOTOS
http://hotactress-kalyani.blogspot.com/2011/08/trisha-hot.html
ANUSHKA SHETTY HOT PHOTOS
http://hotactress-kalyani.blogspot.com/2011/08/anushka-hot.html
KATRINA KAIF RARE PHOTOS
http://southactresstou.blogspot.com/2011/07/katrina-kaif-wallpapers.html
KAJAL LATEST ROMANTIC STILLS
http://southactresstou.blogspot.com/2011/07/kajal-agarwal-in-naperu-shiva.html
TAMANNA HOT SEXY PHOTOS & VIDEOS
http://southactresstou.blogspot.com/2011/07/tamanna-wallpapers.html
PRANITHA LATEST BEAUTIFUL PHOTOS
http://southactresstou.blogspot.com/2011/06/about-pranitha-praneetha-is-beautiful.html

FOR ONLY HOT GUYS SEE THIS
PRIYAMANI HOT PHOTOS
http://hotactress-kalyani.blogspot.com/2011/08/priyamani-hot.html
ARTHI CHABRIA HOT PHOTOS
http://hotactress-kalyani.blogspot.com/2011/08/aarti-chabria-hot.html
DIYA MIRZA HOT PHOTOS
http://hotactress-kalyani.blogspot.com/2011/08/diya-mirza-hot.html
KATRINA KAIF HOT PHOTOS
http://hotactress-kalyani.blogspot.com/2011/08/katrina-kaif-hot.html
DEEPIKA PADUKONE HOT PHOTOS
http://hotactress-kalyani.blogspot.com/2011/08/deepika-padukone-hot.html
NAMITHA HOT PHOTOS
http://hotactress-kalyani.blogspot.com/2011/08/namitha-hot-photos.html
KAJAL AGARWAL HOT PHOTOS
http://hotactress-kalyani.blogspot.com/2011/08/kajal-agarwal-hot-photos.html

111. Weekly Highlights of Solar and Geomagnetic Activity, 15 - 21 August 2011

Newsgroup: rec.radio.amateur.space
Date: 2011-08-24 01:30:05 UTC
From: SWPC.Webmaster@noaa.gov
Message-ID: <20110824013001.4A83133C46@panix2.panix.com>
Source record: 337
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.info

```
:Product: Weekly Highlights and Forecasts
:Issued: 2011 Aug 23 2128 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
# Weekly Highlights and Forecasts
#
Highlights of Solar and Geomagnetic Activity
15 - 21 August 2011

Solar activity was at very low to low levels. Activity was at low
levels on 15 August, with several C-class flares from Region 1271
(N16, L=059, class/area Ehc/290 on 18 August). Activity decreased to
very low levels on 16 August. Activity increased to low levels on
17-18 August, with several C-class flares from both Region 1271 and
Region 1272 (S21, L=054, class/area Dao/090 on 21 August). No flares
were observed on 19 August. Acitivity increased to low levels during
20-21 August. The largest of these was a C3 flare from Region 1271.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at
normal to moderate levels during 15-16 August. Fluxes increased to
normal to high levels on 17-18 August. Fluxes decreased to moderate
levels during 19-20 August. Fluxes ranged from normal to moderate on
21 August.

Geomagnetic field activity was at predominantly quiet to unsettled
levels with an isolated period of active to minor storm levels on 15
August due to a coronal hole high-speed stream (CH HSS). Activity
decreased to quiet to unsettled levels, with isolated active levels
during 16-17 August as the CH HSS subsided. Activity decreased to
quiet levels during 18-19 August. Activity increased to quiet to
unsettled levels during 20-21 August due to a CH HSS.

Forecast of Solar and Geomagnetic Activity
24 August - 19 September 2011

Solar activity is expected to be at very low to low with a chance
for moderate levels during 24 August to 06 September until old
Region 1263 (N18, L=315) departs. Activity is expected to decrease
to very low to low levels for the rest of the period.

No proton events are expected at geosynchronous orbit.
```

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at normal to moderate levels through 03 September. Fluxes are expected to increase to moderate to high levels during 04-09 September. Fluxes are expected to decrease to normal to moderate levels during 10-12 September. Fluxes are expected to increase to moderate to high levels during 13-14 September. Fluxes are expected to decrease to normal to moderate levels during 15-19 September.

Geomagnetic field activity is expected to be at quiet levels during 24-26 August. Acitivity is expected to be at quiet to unsettled levels on 27-28 August due to a weak recurrent CH HSS. Activity is expected be decrease to quiet levels during 29 August - 02 September. Activity is expected to increase during 03-05 September due to a recurrent CH HSS. Predominantly quiet levels are expected during 06-10 September. Activity is expected to increase to quiet to active levels during 11-12 September due to a recurrent CH HSS. Predominantly quiet levels are expected for the rest of the period.

112. ANS-233 AMSAT News Service Weekly Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2011-08-24 20:15:26 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <006701cc629a$8867ee60$9937cb20$@net>
Source record: 338
Cross-posted to: rec.radio.amateur.space,rec.radio.info

AMSAT NEWS SERVICE
ANS-233

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* AMSAT Symposium Banquet Speaker Announced
* AMSAT Fox to Become Fox-1 and Fox-2
* Worked 5 in EM55 Award List Continues to Grow
* FO-29 Reaches 15th Birthday
* BPSK-1000 Test Files and Downlink SDR Passband Recording Available
* NASA Announces Next Opportunity for CubeSat Space Missions
* Time Running Out On The DARA Matching Gift Challenge
* Satellite Shorts From All Over
* ARISS Status - 15 August 2011

SB SAT @ AMSAT $ANS-233.01
AMSAT Symposium Banquet Speaker Announced

AMSAT News Service Bulletin 233.01
From AMSAT HQ SILVER SPRING, MD.
August 21, 2011
To All RADIO AMATEURS
BID: $ANS-233.01

The Symposium committee is pleased to announce that Lance Ginner, K6GSJ has agreed to be our banquet speaker. 2011 is the 50th anniversary of the first amateur satellite in space (OSCAR 1) and Lance was part of the team that developed that satellite.

We are also pleased to announce that Alan Bowker, WA6DNR has volunteered to take over the reins for the 2011 AMSAT Symposium in San Jose, CA. Alan was kind enough to step in for Herb Sullivan, K6QXB who had to resign this week for personal reasons.

The Symposium and Annual Meeting will be held Nov 4-6 at the Wyndham San Jose Hotel adjacent to the San Jose airport. See the AMSAT Web site for details, reservation form and additional information.

[ANS thanks Gould, WA4SXM, for the above information]

/EX

SB SAT @ AMSAT $ANS-233.02
AMSAT Fox to Become Fox-1 and Fox-2

AMSAT News Service Bulletin 233.02
From AMSAT HQ SILVER SPRING, MD.
August 21, 2011
To All RADIO AMATEURS
BID: $ANS-233.02

The AMSAT Fox CubeSat project is being split into a complementary pair of new CubeSats named Fox-1 and Fox-2.

Fox-1 will address the need to quickly develop and launch a replacement for the ailing AO-51. Fox-1 will include an FM transponder paired with a simple IHU for telemetry and control and fitted to a basic CubeSat space frame. This small and highly focused set of capabilities will significantly reduce the time needed for satellite development and construction allowing for a launch target in the second half of 2013.

The advanced technology, research and development work, started for the original Fox satellite, will be continued and rolled into Fox-2 including the software defined transponder. With Fox-1 addressing the immediate need for an AO-51 replacement, Fox-2 will instead be designed for a linear transponder mission. A linear transponder requires considerably more power so Fox-2 will also include an advanced power system and a cutting-edge space frame with deployable solar panels. Fox-2 will have a launch target in the 2015 time frame.

There are still opportunities for developers interested in working on these satellites especially in the areas of project management, systems engineering, thermal and mechanical design, CNC machining, circuit design, software development, system test and test equipment development.

If interested, please send email to Tony Monteiro, AA2TX@amsat.org

[ANS thanks AMSAT Vice-President of Engineering, Tony Monteiro, AA2TX for the above information]

/EX

SB SAT @ AMSAT $ANS-233.03
Worked 5 in EM55 Award List Continues to Grow

AMSAT News Service Bulletin 233.03
From AMSAT HQ SILVER SPRING, MD.
August 21, 2011
To All RADIO AMATEURS
BID: $ANS-233.03

In an effort to help increase interest in satellites, hams in the Memphis, Tennessee area have created a new award for working five (5) different hams via satellite in the EM55 grid.

You do not have to be in your home grid to count the stations worked. There are several satellite ready hams in EM55. Here is the current list of EM55 based satellite operators that we know of: WA4NVM, WA4HFN, WB4LHD, WA4OVO, KI4OTG, KD4NOQ, KJ4BIX, AJ4KF, N4MGT and W5KUB.

Send your log to WA4NVM or WA4HFN for checking, along with your current mailing address. The award is free and should any donations be sent, they will be forwarded to AMSAT along with your call and name.

This award will be effective 1 June 2011, therefore, all contacts must be on or after this date.

Here is list of the Worked 5 in EM55 awards:

WA4NVM - 1 KB0RZD - 6 KB1RVT - 11 KM9U - 16 NX9B - 21
WA4HFN - 2 W5KUB - 7 AC0RA - 12 K4FEG - 17 KC0YBM - 22
KI4OTG - 3 AJ5C - 8 K4YYL - 13 K7TRK - 18 N8MS - 23
K8YSE - 4 CO6CBF - 9 KB1PVH - 14 KF7MYK - 19 W5PFG - 24
N9AMW - 5 WC7V - 10 N8RO - 15 KI6YAA - 20

[ANS thanks Rick, WA4NVM for the above information]

/EX

SB SAT @ AMSAT $ANS-233.04
FO-29 Reaches 15th Birthday

AMSAT News Service Bulletin 233.04
From AMSAT HQ SILVER SPRING, MD.
August 21, 2011
To All RADIO AMATEURS
BID: $ANS-233.04

Japan's FO-29 satellite passed its 15th birthday on August 17th. Thanks to the careful power system management by the operating team the analog repeater continues to function well.

Recent telemetry received from FO-29 shows:
Operational continuous analog bus voltage: 15 ~ 16.5V
Solar generation current: 1050 ~ 1450mA
Battery Voltage: 16.0 ~ 17.5V
Charging current: 70m ~ 110mA
Transmit Power: 500 ~ 900mW
Assemblies Temperature: 0 ~ 11.5 °
Battery Temperature: 10.5 ~ 11.5 °

The linear transponder can be accessed on these frequencies:

Uplink: 146.000 - 145.900 MHz
Downlink: 435.800 - 435.900 MHz
Beacon: 435.795 MHz

The FO-29 Blog is on-line at:
http://blog.goo.ne.jp/fo-29
A google english translation of the blog can be found at:
http://tinyurl.com/FO29Blog

[ANS thanks T.Oguro, JG1KOE on behalf of the FO-29 Control Team
for the above information]

/EX

SB SAT @ AMSAT $ANS-233.05
BPSK-1000 Test Files and Downlink SDR Passband Recording Available

AMSAT News Service Bulletin 233.05
From AMSAT HQ SILVER SPRING, MD.
August 21, 2011
To All RADIO AMATEURS
BID: $ANS-233.05

Even if your station does not have a 2 meter SSB receiver capable
of copying the BPSK-1000 telemetry downlinked on 145.920 MHz there
are recorded files allowing you to experiment with the ARISSatTLM
software and Software Defined Radio (SDR) techniques in an off-
line mode.

Download and install ARISSatTLM software from:
http://www.arissattlm.org
The ARISSatTLM Software Quick Start Guide remains available from
the link on the AMSAT front page: http://www.amsat.org. This guide
describes software installation, real-time signal reception, and
playback of recorded BPSK-1000 telemetry files.

AMSAT-DK has made several recordings of the BPSK-1000 beacon with
their OZ7SAT station. Start at:
http://www.amsat.dk/oz7sat/sched.php?gs&#65533;1kte&sat&#65533;ISSAT-1&statusAll
Then select a particular pass and download the recording. The files
are about 65 MB each. Their system starts recording about 90 seconds
before AOS and continues to a bit after LOS as calculated for their
location in Copenhagen. These recordings can be played back using the
ARISSatTLM software (Start Sound Card, Open WAV File).

Additionally, the Morse Code Decoder window in the ARISSatTLM soft-
ware also works on HF. Tune in a CW signal using the Tuning Indica-
tor window. The decoded CW will stream across the Morse Code Decoder
Window.

Recording of Full ARISSat-1/KEDR Downlink Passband Available

Mark, N8MH recorded several passes of ARISSat-1 using the Funcube
Dongle (FCD) Software Defined Receiver and the HDSDR program. The

resulting file from a 10 min pass, recording the whole FCD passband, is about 250MB. Mark posted a file on the AMSAT FTP server at: http://tinyurl.com/3d87h8l

This file can be played back using the HDSDR software which you can download from: http://www.hdsdr.de/ Mark's recording was made with NO correction for Doppler. About a minute into the recording (click to fast forward, back up, etc. you'll see signals--CW telemetry, the BPSK telemetry, the linear transponder, and the FM voice channel. Move around, change modes, listen, etc. You can back up to a previous spot on the recorded signal at will, just with a click.

Mark noted additional experimental and classroom opportunities, "If the bug really bites you, you can install Virtual Audio Cable (VAC) and have HDSDR use it as the output, and then configure a decoding program (like ARISSatTLM or MMSSTV) to decode telemetry and/or SSTV pics using VAC as the input. It's neat. You can print SSTV without tuning for Doppler on playback. Tuning for the BPSK telemetry will require adjustment for doppler shift."

Steve Belter, N9IP has put together an excellent tutorial on setting and using HDSDR especially with the FCD. Find it in the Yahoo group: http://uk.groups.yahoo.com/group/funcube/files/User%20Guides/
You can read the on-line discussions using the FUNcube Dongle SDR by joining their yahoo group at:
http://uk.groups.yahoo.com/group/funcube/

Howard, G6LVB, creator of the FUNcube Dongle SDR wrote this week that he has released a new firmware version to correct a bug in the USB streaming code which produced clicking every few seconds for some users. The firmware image is here:
http://www.funcubedongle.com/MyImages/export18i.pro.bin

[ANS thanks the ARISSat-1/KEDR Team for the above information]

/EX

SB SAT @ AMSAT $ANS-233.06
NASA Announces Next Opportunity for CubeSat Space Missions

AMSAT News Service Bulletin 233.06
From AMSAT HQ SILVER SPRING, MD.
August 21, 2011
To All RADIO AMATEURS
BID: $ANS-233.06

NASA is seeking proposals for small satellite payloads to fly on rockets planned to launch between 2012 and 2014. These miniature spacecraft, known as CubeSats, could be auxiliary payload on previously planned missions.

CubeSats are a class of research spacecraft called nanosatellites. The cube-shaped satellites are approximately four inches long,

have a volume of about one quart and weigh less than three pounds.

Proposed CubeSat investigations must be consistent with NASA's Strategic Plan and the Education Strategic Coordination Framework. The research should address aspects of science, exploration, technology development, education or operations.

Applicants must submit proposals electronically by 4:30 p.m. EST on Nov. 14, 2011. NASA will select the payloads by Jan. 30, 2012. Selection does not guarantee a launch opportunity. The selected spacecraft will be eligible for flight after final negotiations when a launch opportunity arises. NASA will not provide funding for the development of the small satellites.

NASA recently announced the results from the second round of the CubeSat Launch Initiative. From the first two launch initiatives, 32 payloads made the short-list for launch opportunities in 2011 and 2012. They are eligible for launch pending an appropriate opportunity and final negotiations. The satellites come from 18 states: Alabama, Alaska, California, Colorado, Hawaii, Kentucky, Louisiana, Maryland, Massachusetts, Michigan, Missouri, Montana, New Hampshire, New Mexico, New York, Pennsylvania, Utah and Virginia.

For additional information about NASA's CubeSat Launch Initiative program, visit:
http://go.nasa.gov/puk9K2
http://go.nasa.gov/CubeSatOp

[ANS thanks NASA Education Express - Aug. 11, 2011 for the above information]

/EX

SB SAT @ AMSAT $ANS-233.07
Time Running Out On The DARA Matching Gift Challenge

AMSAT News Service Bulletin 233.07
From AMSAT HQ SILVER SPRING, MD.
August 21, 2011
To All RADIO AMATEURS
BID: $ANS-233.07

Donate to AMSAT and DARA will contribute matching funds. The Dayton Amateur Radio Association (DARA) fund raising challenge for AMSAT continues until September 1, 2011. DARA will match $1.00 for every $3.00 donated up to $5,000.00.

AMSAT kicked off the fundraising campaign at the Hamvention, where donations began count for the challenge. Please consider making a donation to AMSAT and have your effort multiplied. We appreciate DARA's support for AMSAT!

Your donation will support our "Getting AMSAT Back Into Space" campaign by providing needed funds for AMSAT Project Fox Cubesat

which will provide a 2M to 70cm FM transponder matching the performance of AO-51.

+ On-line at the AMSAT Store:
http://www.amsat-na.com/store/donation.php

+ You may click on the donation widget on our http://www.amsat.org
web page.

+ You may call Martha at the AMSAT Office:
From the US call toll free at: (888) 322-6728
From all other locations call: (301) 589-6062
and you can send a fax to: (301) 608-3410

+ You can send donations by postal mail to:
AMSAT-NA
850 Sligo Ave #600
Silver Spring, MD, 20910

[ANS thanks AMSAT Headquarters for the above information]

/EX

SB SAT @ AMSAT $ANS-233.08
Satellite Shorts From All Over

AMSAT News Service Bulletin 233.08
From AMSAT HQ SILVER SPRING, MD.
August 21, 2011
To All RADIO AMATEURS
BID: $ANS-233.08

+ James French, W8ISS, Editor of the Weekly Satellite Report apologizes for problems with his e-mail over the past few weeks which may have prevented a few WSR bulletins from being transmitted by the list. James reports being able to e-mail the bulletin but problems with his ISP have appeared to prevent delivery to the remailer. This week's WSR-231 appears to have been successfully distributed.

+ AMSAT received the sad news that Mark Austin, KB1GVR, became a silent key on August 8. Graveside services were held on August 18 in Ellsworth, Maine. Mark's obituary can be read on-line at:
http://tinyurl.com/3bcrkg4 (BangorDailyNews.com)

+ Dove OSCAR 17 video - January 22, 1990, saw the launch of the DOVE Amateur Radio satellite sponsored by AMSAT-Brazil and lead by Dr. Junior Torres DeCastro, PY2BJO. DOVE, an acronym for Digital Orbiting Voice Encoder, carried hardware capable of reproducing digitized speech, or controlling a Votrax speech synthesizer and transmitted AX.25 packet on 145.825 MHz. Watch the video, showing historic still pictures of DOVE: http://tinyurl.com/3o87x4f (Southgate ARC)

+ P-POD grows up: A 6U Canisterized Satellite Dispenser was displayed at the recent Small Satellites conference that will allow larger CubeSats to be deployed. Traditionally much smaller P-POD's (Poly Picosatellite Orbital Deployer) have been used to deploy CubeSats. The 6U CSD standard allows CubeSats up to 12 x 24 x 36 cm weighing 12Kg to be deployed and is shown in a video: http://tinyurl.com/3hjmrmf (Southgate ARC)

+ UniverseToday posted STS-135 Redux: Launch Tribute Video at:

http://www.universetoday.com/88183/sts-135-redux-launch-tribute-video/

+ AMSAT's Keeper of the Keps, Ray Hoad, WA5QGD reported this week that ARISSat-1 has been added to the KEP distribution. The Catalog # is 37772.

+ Christian Diemoz, IX1CKN/HB9EYT/KC2YXI, has published a history of SAREX experiments and operations on the DXCoffee.com website: http://www.dxcoffee.com/eng/2011/08/10/radio-space-beginning-sarex/

+ Video of the Atlas-V launch of the Juno mission to Jupiter has been posted at: http://www.universetoday.com/88018/rockin-with-the-juno-launch/

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-233.09
ARISS Status - 15 August 2011

AMSAT News Service Bulletin 233.09
From AMSAT HQ SILVER SPRING, MD.
August 21, 2011
To All RADIO AMATEURS
BID: $ANS-233.09

1. Caribbean Youth Radio ISS

On Monday, August 8, children attending the Caribbean Youth Science Forum (CYSF), a regional event sponsored by the National Institute for Higher Education, Research, Science & Technology (NIHERST) and located in Port-of-Spain, Trinidad, West Indies, participated in an Amateur Radio on the International Space Station (ARISS) contact. Telebridge station LU8YY in Argentina provided the radio connection. The youth interacted with Astronaut Satoshi Furukawa, KE5DAW on the ISS, receiving answers to ten of their questions about space. The contact was integrated into the CYSF which included lectures, field trips, projects and debates that promoted science, technology and innovation. The forum hosted 250 students this year from 6 countries. Newsday reported on the contact: http://www.newsday.co.tt/news/0,145262.html

2. Italian Camp Contacts ISS

A successful Amateur Radio on the International Space Station (ARISS) contact was held between on-orbit astronaut Ron Garan, KF5GPO and the Youth Hostel "La Foresta" in Perugia, Italy on Thursday, August 11 via station K6DUE in Greenbelt, Maryland. Garan fielded 18 questions posed to him by the children. The camp, organized by Panda Adventure in cooperation with ESA /ESRIN, focuses on space education and provides activities such as field researches, experiments, use of technical instruments, and games to explore the Earth and Sky.

3. ARISS-U.S. Reviews Proposals

The NASA Teaching From Space Office received over 100 inquiries about the U.S. proposal process for ARISS contacts that will be scheduled during the January - July 2012 time frame. Twenty-four schools met the July 15 deadline and submitted proposals. The U.S. Selection Committee is currently reviewing the proposals and will select U.S. schools by the

end of the month. Another window of opportunity for U.S. schools and organizations to submit proposals will open later in the year.

4. EE Times - ARISSat Blog

The fourth and fifth entries in EE (Electronic Engineering) Times "Chips

in Space" blog covering amateur radio satellite ARISSat-1 have been post-
ed. See:
http://eetimes.com/electronics-blogs/chips-in-space/4218536/Chips-in-Spac
e--
SuitSat-2-becomes-ARISSat-1--When-we-lost-our-suit---not-really-

http://eetimes.com/electronics-blogs/other/4218756/Chips-in-Space--Let-s-
loo
k-
inside-ARISSat-1--part-1-

5. DXCoffee Article on Ham Radio in Space

The Italian site DXCoffee.com printed a story about the history of amateur radio in space. The article covers amateur radio used by Owen Garriott, the Mir station, SAREX and ARISS and includes recent contacts with Doug Wheelock and Paolo Nespoli. "Radio in space: in the Beginning there was SAREX," may be viewed here:
http://www.dxcoffee.com/eng/2011/08/10/radio-space-beginning-sarex/

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's
Club. Members of the President's Club, as sustaining donors to AMSAT Project
Funds, will be eligible to receive additional benefits. Application forms

are
available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

113. WSR-237 AMSAT Weekly Satellite Report

Newsgroup: rec.radio.amateur.space
Date: 2011-08-26 01:30:52 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <003401cc638f$c352d300$49f87900$@net>
Source record: 339
Cross-posted to: rec.radio.amateur.space,rec.radio.info

```
This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-237.S1
WSR 237 Part 1 08/25/2011

AMSAT NEWS SERVICE BULLETIN 237.S1
FROM AMSAT HQ SILVER SPRING, MD, August 25, 2011
TO ALL RADIO AMATEURS
BID: $WSR-237.S1

ARISSat-1 (Radioskaf-b) (Kedr)
Catalog number: 37772
Launch date: August 03, 2011 1843z
Launch site: International Space Station

Status: Operational

Callsign: RS01S

Current Mode(s):
Linear Transponder: U/v
Uplink: 435.758 to 435.742 MHz CW/LSB
Downlink: 145.922 to 145.938 MHz CW/USB

FM Telemetry/SSTV/Messages/ID:
Downlink: 145.950 MHz FM

Telemetry/Beacon:
Downlink: 145.939 MHz CW1
145.919 MHz CW2
145.920 MHz 1k BPSK USB
145.920 MHz 400b BPSK USB

Official Webpage:http://www.amsat.org/amsat-new/ARISSat/ARISSat.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/informal_detail.php?serialnum=89
[08112011]
=====
SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009 1555z
```

Launch site: Baikonur, Kazakhstan

Status: By schedule

Callsign: ZS0SUM

Uplink: 145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=88
[02092011]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=68
[02092011]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05, 2005 0444z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.9360 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=30

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[02092011]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004 0745z
Launch site: Baikonur, Kazakhstan

Status: Semi-operational - IHU crash each eclipse

Current Mode(s):
Voice repeater: V/u
Uplink: 145.880 MHz FM
Downlink: 435.150 MHz FM

Telemetry: Recovery efforts
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.880 MHz FM
145.920 MHz FM
145.920 MHz FM - 67 Hz PL tone burst
1268.705 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.703 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=19
[06162011]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002 1700z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4
Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the re-
peater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
the 10 minute timer.
[02092011]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
145.870 MHz FM
145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK

Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[06232011]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993 0140z
Launch site: Kourou, French Guiana

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[02092011]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974
Launch site: Vandenberg AFB, California, USA

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
145.975 to 145.925 MHz CW/USB Mode B (8W PEP)

145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
145.972 MHz CW
435.100 MHz CW
2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02092011]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
Kourou, French Guiana
Uchinoura Space Center, Japan
Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - OFF
APRS - OFF
SSTV - OFF

Expedition 28 Crew (May - September 2011):
Commander: Andrey Borisenko
Flight Engineer: Ron Garan KF5GPO
Flight Engineer: Alexander Samokutyaev
Flight Engineer: Satoshi Furukawa
Flight Engineer: Sergey Volkov KE5DAW
Flight Engineer: Micheal Fossum KF5AQG

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[07282011]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-237.S2
WSR 237 Part 2 08/25/2011

AMSAT NEWS SERVICE BULLETIN 237.S2
FROM AMSAT HQ SILVER SPRING, MD, August 25, 2011
TO ALL RADIO AMATEURS
BID: $WSR-237.S2

O/OREOS
Catalog Number: 37224
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.035 MHZ AX.25

Beacon:

Callsign:

URL: http://www.ooreos.org/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=146
[02092011]
=====

Rax-1 Radio Aurora Explorer
Catalog Number: 37223
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.505 MHz 9k6 GMSK

Beacon:

Callsign: RAX-1

URL: http://rax.engin.umich.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=165
[02092011]
=====
FO-69 Fastrac-1 Sara Lily
Catalog Number: 37227
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Operational

Uplink 1: 145.980 MHz 1k2 baud
Uplink 2: 145.825 MHz 1k2 baud
Downlink: 437.345 MHz 1k2 and 8k6 baud

Beacon: 437.435 MHz 1k2 AX.25

Callsign: Fast1

URL: http://fastrac.ae.utexas.edu/index.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=83
[07052011]
=====
FO-70 Fastrac-2 Emma
Catalog Number: 37380
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Operational

Uplink 1: 435.025 MHz 1k2 baud
Uplink 2: 437.435 MHz 9k6 baud
Downlink: 145.825 MHz

Beacon: 145.825 MHz 1k2 AX.25

Callsign: Fast2

URL: http://fastrac.ae.utexas.edu/index.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=84
[07052011]
=====
StudSat
Catalog Number: 36796
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink: 437.505MHz, 9600bps FSK
Downlink: 437.505MHz, 9600bps FSK
Beacon : 437.505MHz, 20bps ASK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=164
[02092011]
=====
TIsat-1
Catalog Number: 36799
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On orbit

Callsign: HB9DE

Uplink: 145.980MHz FM, AFSK
Downlink: 437.305MHz FM, AFSK
Beacon: 437.305MHz CW

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=118
[02092011]
=====
HO-68 HOPE-1 (CAS-1)(XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009 0231z
Launch site: Taiyuan Space Center, PRC

Status: Beacon only

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
145.9250 - 145.9750 MHz SSB/CW
145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
435.7650 - 435.7150 MHz SSB/CW
435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=108

For more information about XW-1 (CAS-1):
http://
[08112011]
=====
SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w): 437.5050MHz FSK 1k2bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=109
[02092011]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
437.3850 MHz FSK 9k6bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=110
[02092011]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=113

[02092011]
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
Beacon(500mw): 436.000MHz GMSK 9k6bp
[02092011]
=====
CP-6
Catalog Number: 35003
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: Operational

Downlink: 437.365 MHz 1k2 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=121
[02092011]
=====
HAWKSAT 1
Catalog number: 35004
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: operational

Downlink: 437.345 MHz ?

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=105
[02092011]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: Operational

Downlink: 437.465 MHz 1k2 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=94
[02092011]

=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009 0115z
Launch Site: Satish Dhawan Space Centre, India

Status: ?

Downlink: 435.000 MHz
Uplink: 145.800 MHz

Telemetry: 137.400 MHz
[02092011]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon: 437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=101
[02092011]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: In Orbit

Downlink: 437.375 MHZ FSK9k6/CW
Beacon: 437.375 MHz FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[02092011]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
437.465 MHz FM/CW
Beacons: 437.305 MHz FM/CW
437.275 MHz FM/CW

Callsigns: JR5YBN
JR5YBO

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[02092011]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Downlink: 437.455 MHz AFSK/CW
Beacon: 437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[20092011]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon: 437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[02092011]

=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008 1520z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Curent Modes: Telemetry
Audio
Images

Downlinks: 435.315 MHz
435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02092011]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web
page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=46
[02092011]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=60

[02092011]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational ?

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL
=/satellites/status.php
[07052011]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Current Mode: dependant on last received command

Uplink: 145.980 MHz FM
Downlink: 437.275 Mhz CW
437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[06162011]
=====
CO-66 Seeds II

Catalog number:
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web
page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL
=/satellites/status.php
[02092011]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=72
[02092011]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=74
[02092011]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005 0652z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=37
[02092011]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: ?????

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[02092011]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004 0745z
Launch site: Baikonur, Kazakhstan

Status: Semi-operational - IHU crash each eclipse

Current Mode(s):
Voice repeater: V/u
Uplink: 145.880 MHz FM
Downlink: 435.150 MHz FM

Telemetry: Recovery efforts
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.880 MHz FM
145.920 MHz FM
145.920 MHz FM - 67 Hz PL tone burst
1268.700 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.708 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=19
[06162011]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[02252011]
=====
CO-55 Cute-1.7+APD II
Catalog Number: 27844
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Current Mode: CW downlink worldwide
AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=78
[02092011]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001 0240z
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[02092011]
=====
RS-22 RADIO SPORT 22 (MOZHAYETS 4)
Catalog number: 27939
Launch Date: September 27, 2003 0612z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02092011]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990
Launch site: Kourou, French Guiana

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
145.860 MHz 1200-baud Manchester FSK
145.880 MHz 1200-baud Manchester FSK
145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[02092011]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984
Launch site: Vandenburg AFB, California, USA

Status: Operational ?

Current Mode: /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz
Mode-S Beacon: 2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[07052011]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)

Launch sites: Baikonur, Kazakhstan
Kourou, French Guiana
Uchinoura Space Center, Japan
Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - OFF
APRS - OFF
SSTV - OFF

Expedition 28 Crew (May - September 2011):
Commander: Andrey Borisenko
Flight Engineer: Ron Garan KF5GPO
Flight Engineer: Alexander Samokutyaev
Flight Engineer: Satoshi Furukawa
Flight Engineer: Sergey Volkov KE5DAW
Flight Engineer: Micheal Fossum KF5AQG

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[07282011]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-237.S3
WSR 237 Part 3 08/25/2011

AMSAT NEWS SERVICE BULLETIN 237.S3
FROM AMSAT HQ SILVER SPRING, MD, August 25, 2011
TO ALL RADIO AMATEURS
BID: $WSR-237.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NANOSAIL-D
Catalog Number:
Ejection Date: January 17, 2011

Status: On orbit

Downlink: 437.270 MHz AX.25

URL: http://nanosaild.engr.scu.edu/dashboard.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=115
[01272011]
=====
CP4
Catalog Number: 31132
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=79
[09062010]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=76
[09062010]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=51
[09062010]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.250

Official Website: http://www.ncube.no

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=24
[09062010]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink 2401.835 MHz 38k4 packet

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=54
[09062010]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=53
[09062010]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks: 145.850 MHz
145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====

SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks

V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON General Beacon(GB) Middle Beacon(MB) Engineering Beacon(EB)
2 m none 145.898 MHz none
70cm 435.438 MHz 435.588 MHz 435.838 MHz
13cm(1) 2400.188 MHz 2400.338 MHz 2400.588 MHz
13cm(2) 2401.173 MHz 2401.323 MHz 2401.573 MHz
3cm 10450.975 MHz 10451.125 MHz 10451.375 MHz
1.5cm 24047.885 MHz 24048.035 MHz 24048.285 MHz
[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
145.890 FM
145.930 FM
1269.700 FM
1269.800 FM
1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[07172010]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink: 435.1380 MHz AFSK 1200 BPS
Downlink: 435.2060 MHz AFSK 1200 BPS
Uplink: 145.8150 MHz AFSK 1200 BPS
Uplink: 145.8350 MHz AFSK 1200 BPS
Uplink: 145.8550 MHz AFSK 1200 BPS
Uplink: 145.8750 MHz AFSK 1200 BPS
[06042009]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks: 145.875 MHz FM 1200-baud
145.900 MHz FM 1200-baud
145.925 MHz FM 1200-baud
145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink: 435.0625 MHz FM 1k2bps AFSK
435.1125 MHz FM 1k2bps AFSK
435.1375 MHz FM 1k2bps AFSK
Downlink: 145.9750 MHz FM 1k2bps AFSK
2446.5025 MHz FM 1k2bps AFSK

Beacon: 2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink: 435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons: 435.795 MHz CW
435.910 MHz AX25

Voice Transponder:
Uplink: 145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks: 145.850 MHz
145.870 MHz
145.890 MHz
145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode: V/u

Uplink: 145.900 MHz FM 1200-baud Manchester FSK (reserved)
145.920 MHz FM VOICE
145.940 MHz FM 1200-baud Manchester FSK (reserved)
145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink: 437.026 MHz USB VOICE
(1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink: 145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink: 145.8500 MHz MFSK 1200 BPS
Uplink: 145.8700 MHz MFSK 1200 BPS
Uplink: 145.8900 MHz MFSK 1200 BPS
Uplink: 145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.8500 - 145.9000 MHz SSB/CW
Downlink 29.4000 - 29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink: 29.4500 - 29.5500 MHz SSB/CW

Beacons: 29.450 MHz
435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink: 145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB

Beacon 1: 29.352 MHz (intermittent)
Beacon 2: 29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12

Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-237.S4
WSR 237 Part 4 08/25/2011

AMSAT NEWS SERVICE BULLETIN 237.S4
FROM AMSAT HQ SILVER SPRING, MD, August 25, 2011
TO ALL RADIO AMATEURS
BID: $WSR-237.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Re-entered
Re-entered: October 25, 2009

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=56
[09062010]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 437.325 MHz 9k6 GMSK
437.325 MHz CW 20wpm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=117
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 436.250 MHz 9k6 FHSS
[11112009]
=====
Pollux
Catalog Number: 35693
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=139
[09062010]
=====
Castor (ANDE-2)
Catalog Number: 35694
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=144
[09062010]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=59
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Re-Entered
Re-entered date: August 8, 2010

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[08082010]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at} amsat.org
NNNN
/EX

114. ANS-240 AMSAT News Service Weekly Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2011-08-28 01:25:03 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <001601cc6521$4b3cbe60$e1b63b20$@net>
Source record: 340
Cross-posted to: rec.radio.amateur.space,rec.radio.info

AMSAT NEWS SERVICE
ANS-240

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* AO-51 Operations Update
* Time Running Out On The DARA Matching Gift Challenge
* New ARISSat-1 FM Operating Mode
* Second Call For Papers for the 2011 AMSAT Space Symposium
* Kentucky Space Consortium Announces CubeSat Workshop
* Near-Earth Asteroid Fly-by Receiving Opportunity
* UK Students Develop Cosmic Radiation Experiment
* FCC Issues Experimental License For Imaging Tests on 2M & 70cm
* Satellite Shorts From All Over

SB SAT @ AMSAT $ANS-240.01
AO-51 Operations Update

AMSAT News Service Bulletin 240.01
>From AMSAT HQ SILVER SPRING, MD.
August 28, 2011
To All RADIO AMATEURS
BID: $ANS-240.01

AO-51 Control Station, Mark Hammond, N8MH wrote a status update on this satellite. Mark noted that since the failure of the first cell on the six-cell battery the ground controllers have been limited to simple commands for basic configurations.

Mark said that ground control stations have evolved basic control and management techniques of AO-51 which allow them to set power levels manually, change uplinks/downlinks. Additional features such as telemetry collection/storage, and the BBS are not functional at this time. If the satellite resets during eclipse these basic functions must be restored manually by a ground station.

Ground stations have discovered there is a second cell in the battery showing problems. Mark noted, "We think it will be the next cell to go with the probable result that our limited manual mode of operation probably will no longer be an option, and the mission might be considered over."

AO-51 is currently transmitting on:

Downlink: 435.150 MHz FM (LHCP) and using a
Uplink: 145.880 MHz FM

The power level is just under 1 watt (about 980 mW). Controllers expect to keep this configuration until further notice.

Keep up with the latest AO-51 Control Team News on-line at:
http://www.amsat.org/amsat-new/echo/CTNews.php

The current scenario of AO-51 is one reason we need to keep moving AMSAT and satellite development/building/launching moving forward!! We have learned a lot already with ARISSat-1, and FOX looks promising. AMSAT needs the support of its users now more than ever!

[ANS thanks AO-51 Control Station, Mark Hammond, N8MH for the above information]

/EX

SB SAT @ AMSAT $ANS-240.02
Time Running Out On The DARA Matching Gift Challenge

AMSAT News Service Bulletin 240.02
>From AMSAT HQ SILVER SPRING, MD.
August 28, 2011
To All RADIO AMATEURS
BID: $ANS-240.02

Donate to AMSAT and DARA will contribute matching funds. The Dayton Amateur Radio Association (DARA) fund raising challenge for AMSAT continues until September 1, 2011. DARA will match $1.00 for every $3.00 donated up to $5,000.

Please consider making a donation to AMSAT and have your effort multiplied. We appreciate DARA's support for AMSAT! Your donation will support our "Getting AMSAT Back Into Space" campaign by providing needed funds for AMSAT Project Fox-1 Cubesats which will feature a 2M to 70cm FM transponder matching the performance of AO-51.

You can donate several ways:

+ On-line at the AMSAT Store:
http://www.amsat-na.com/store/donation.php

+ You may click on the donation widget on our http://www.amsat.org web page.

+ You may call Martha at the AMSAT Office:
From the US call toll free at: (888) 322-6728
From all other locations call: (301) 589-6062
and you can send a fax to: (301) 608-3410

+ You can send donations by postal mail to:
AMSAT-NA
850 Sligo Ave #600
Silver Spring, MD, 20910

[ANS thanks AMSAT Headquarters for the above information]

/EX

SB SAT @ AMSAT $ANS-240.03
New ARISSat-1 FM Operating Mode

AMSAT News Service Bulletin 240.03
>From AMSAT HQ SILVER SPRING, MD.
August 28, 2011
To All RADIO AMATEURS
BID: $ANS-240.03

ARISSat-1/KEDR Project Manager Gould Smith, WA4SXM reported on this week's status of the satellite. Gould noted that while the battery performed as expected during the first week of operation. Lower voltages during eclipse began to show up in the telemetry on 10 Aug 2011. The voltages during eclipse have continued to decline causing the satellite to reset and occasionally go into Emergency power mode.

Gould explained the changes noted on the 145.950 MHz FM downlink that were heard this week:

+ A Male voice for the spoken telemetry means that the female voice files on the SD card could not be read.

+ If no greetings are transmitted this means that these message stored on the SD card could not be read.

+ A short Mission-Elapsed-Time (minutes to hours) has been noted while the satellite was still in a long period of sunlight indicating that satellite must have reset during sunlight.

Reports received on later orbits indicated that the female voiced telemetry and the greetings messages had returned to normal operation once the solar panels had recharged the battery.

After each reset the satellite MET (Mission Elapsed Timer) goes to 000, waits during the 15 minute TX delay, the power management software checks the current voltage and power values and determines what power mode to operate the satellite. The power mode is re-determined at fixed intervals, especially during illuminated periods to provide the most transmitted signals while protecting the battery.

High power mode provides continuous transmission when sunlight is
charging the battery. If the satellite has entered low power mode
it will transmit for 40 seconds and remain idle for 2 minutes when
in eclipse, or when the battery voltage is low.

The ARISSat-1 team is closely monitoring the situation and is pleased
with how well the power management software is controlling the battery
usage to prolong the lifetime of the battery and the satellite as much
as possible.

Please send your BPSK telemetry into the server arissattlm.org.

[ANS thanks ARISSat-1/KEDR Project Manager Gould Smith, WA4SXM for the
above information]

/EX

SB SAT @ AMSAT $ANS-240.04
Second Call For Papers for the 2011 AMSAT Space Symposium

AMSAT News Service Bulletin 240.04
>From AMSAT HQ SILVER SPRING, MD.
August 28, 2011
To All RADIO AMATEURS
BID: $ANS-240.04

This is the second call for papers for the 2011 AMSAT Space Symposium
to be held Friday, November 4th through Sunday, November 6th at the
Wyndham San Jose Hotel, San Jose, California.

Proposals for papers, symposium presentations and poster presentations
are invited on any topic of interest to the amateur satellite community.

We request a tentative title of your presentation as soon as possible,
with final copy submitted by October 1, 2011 for inclusion in the
printed proceedings.

Abstracts and papers should be sent to Dan Schultz, N8FGV, at:
n8fgv@amsat.org.

[ANS thanks Dan Schultz, N8FGV for the above information]

/EX

SB SAT @ AMSAT $ANS-240.05
Kentucky Space Consortium Announces CubeSat Workshop

AMSAT News Service Bulletin 240.05
>From AMSAT HQ SILVER SPRING, MD.
August 28, 2011
To All RADIO AMATEURS
BID: $ANS-240.05

Kentucky Space, a consortium of Kentucky-based colleges and univers-
ities and Make Magazine announced the First annual hackerSPACE Work-
shop focused on CubeSat class satellites to take place in Lexington,

Kentucky, November 11-12.

While learning how to design and build your own fully functional orbital spacecraft, you will work with a team of space professionals and engineers led by Radio Amateur Bob Twiggs, W7RMT. Dr. Twiggs is Emeritus professor and former director of the Space Systems Development Lab at Stanford University, now professor at Morehead State University and also with Kentucky Space. He is credited with inventing both the CubeSat and FemtoSat spacecraft, which are now helping to revolutionize space, putting it within reach of more people than ever.

At this hands-on workshop you'll learn about the design and assembly of small satellites, what kinds of systems are common to all spacecrafts, possible satellite 'apps', the kinds of tests your craft will have to pass before it can be flown, raising funds to support your space project and possible launch opportunities.

Further details at: http://www.kentuckyspace.com/

[ANS thanks Kentucky Space for the above information]

/EX

SB SAT @ AMSAT $ANS-240.06
Near-Earth Asteroid Fly-by Receiving Opportunity

AMSAT News Service Bulletin 240.06
>From AMSAT HQ SILVER SPRING, MD.
August 28, 2011
To All RADIO AMATEURS
BID: $ANS-240.06

The 400 meter diameter near-Earth asteroid 2005 YU55 will be making a 0.85 lunar distance flyby of Earth on November 8. Michael Busch at the UCLA Department of Earth and Space Sciences notes this may an opportunity for amateur satellite operators to observe the fly-by.

UCLA will be conducting an extensive campaign of radar observations with the Arecibo Observatory, the Deep Space Network Goldstone facility, and the Green Bank Telescope and the Very Long Baseline Array.

Because YU55 will be so close to Earth, its radar echo will be detectable with even small antennas (~1 m^2). YU55's echo will be a slowly drifting signal with a bandwidth of ~1 Hz within a few kHz of 2380 MHz or 8560 MHz.

This will present amateur radio operators an opportunity to receive the radar reflections off of the asteroid because of the big dish, big signals originating from Arecibo and Goldstone.

On November 8, 2011, 19:15 - 19:30 UTC, Arecibo will be transmitting a continuous wave tuned to put the asteroid's echo at a constant 2380.000000 MHz at the Green Bank Telescope. Observers elsewhere on

Earth will see the echo within 2 kHz of 2380 MHz, Doppler-shifted by the Earth's rotation. It will be slowly drifting in frequency and have a bandwidth of ~0.6 Hz.

On November 9, 2011, 01:30 - 02:00 UTC, the Goldstone Deep Space Network facility will be be transmitting a continuous wave tuned to put the asteroid's echo a constant 8560.000000 MHz at a second antenna at the Goldstone site. Other observers may see the echo shifted by as much as 6 kHz, and it will have a bandwidth of ~2 Hz.

Initial information can be found on-line at:
http://echo.jpl.nasa.gov/asteroids/2005YU55/2005YU55_planning.html
More details will be announced as the fly-by date approaches.

[ANS thanks Michael Busch, UCLA Department of Earth and Space Sciences for the above information]

/EX

SB SAT @ AMSAT $ANS-240.07
UK Students Develop Cosmic Radiation Experiment

AMSAT News Service Bulletin 240.07
>From AMSAT HQ SILVER SPRING, MD.
August 28, 2011
To All RADIO AMATEURS
BID: $ANS-240.07

The Times newspaper reported on an experiment developed by students in Canterbury that will soon fly in space. They have also teamed up with students in Uganda.

Students at the Simon Langton Grammar school, led by Head of Physics, Dr. Becky Parker are developing a Cosmic Radiation experiment (LUCID) that will be part of the TechDemoSat-1 satellite. It is based around a Cosmic Ray detector chip from CERN and the school raised £60,000 to fund the experiment.

The school say that Dr Obote College in Uganda will soon be working with one of the LUCID cosmic ray detectors and Ugandan students will play an equal part with Langton students in collecting and analysing data on cosmic ray activity as part of an international experiment.

As part of the project Dr. Becky Parker is looking for money to install LUCID equipment in schools across the Britsh Isles and Europe providing ground-based data in a way that will involve hundreds of thousands of students.

TechDemoSat-1 (TDS-1) is developed by Surrey Satellite Technology Ltd (SSTL). The TechDemoSat will function as an £in-orbit test facility£

for the UK Space Agency once launched, qualifying onboard payloads as well as UK satellite software.

At around one meter cubed and a mass of 150kg, TechDemoSat (TDS-1) will carry no less than eight payloads. Additional features proposed for this mission include:

+ An enhanced on board computer giving greater ability to conduct software experiments remotely.

+ A new battery charge regulator and newly qualified cell types on two of the solar panels.

+ A propulsion system will see a smaller tank size trialled with a new high performance resistojet thruster.

+ New sun sensors in the Altitude and Orbital Control System.

+ Standard CANbus interface.

More details can be found on-line at:
http://tinyurl.com/3nvp8zn (sstl.co.uk)

[ANS thanks the Southgate ARC site for the above information]

/EX

SB SAT @ AMSAT $ANS-240.08
FCC Issues Experimental License For Imaging Tests on 2M & 70cm

AMSAT News Service Bulletin 240.08
>From AMSAT HQ SILVER SPRING, MD.
August 28, 2011
To All RADIO AMATEURS
BID: $ANS-240.08

Amateur Radio Newsline Report 1776, dated August 26, 2011, carried a report that the FCC has issued a new experimental license with the call letters WF2XSP to one James Cutler to operate in 144 to 146 MHz and 437 to 439 MHz spectrum. This, for testing an image processing algorithm that will be used on a future space flight mobile, Low Earth Orbit operations ranging from 450 to 820 kilometers in altitude.

The FCC announcement made no other reference to the nature of Cutler's experimentation nor why he requested to do so in the amateur 2 meter and 70 centimeter bands. QRZ.com lists six radio amateurs by the name of James Cutler, but its unknown if any of them are the same James Cutler who has obtained the Experimental License from the FCC.

[ANS thanks Amateur Radio Newsline Report for the above information]

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SB SAT @ AMSAT $ANS-240.09
Satellite Shorts From All Over

AMSAT News Service Bulletin 240.09
>From AMSAT HQ SILVER SPRING, MD.
August 28, 2011

To All RADIO AMATEURS
BID: $ANS-240.09

+ Bryce, KB1LQC has posted a video showing reception of the ARISSat-1 amateur radio satellite using a handheld arrow yagi antenna: http://tinyurl.com/42fbrqe (Southgate ARC)

+ Mario Lorenz, DL5MLO from AMSAT-DL gave a presentation, in English, at the Hacker Space Program track at the Chaos Communication Camp 2011 which ran from August 10-14 at Finowfurt near Berlin, Germany. A video of Mario's presentation, "From OSCAR 1 to Mars and Beyond", can be seen at: http://tinyurl.com/445w7re

+ If a tower falls and no one is near does it still make a sound? Find out when you view a video of the demolition of the 126 meter tower at the Berom&#65533;nster national transmission center. The 216 meter tower at this site remains standing as part of protected monument status.

+ NASA STEREO spacecraft captured a billion-tons cloud of solar plasma from a Coronal Mass Ejection event as it engulfed the Earth: http://www.nasa.gov/mission_pages/stereo/news/solarstorm-tracking.html

+ We have software defined radios ... are you ready for a software defined antenna tuner (of sorts)? A series capacitor, parallel inductor T-network radio frequency impedance match written in JAVA that runs on a web page can be tuned at: http://fermi.la.asu.edu/w9cf/tuner/tuner.html

+ NPR has posted a video, "The Astronaut's Guide To Life In Space" at: http://vimeo.com/27738605

+ The dates for the next Hudson Valley Satcom nets are September 1, September 15, and September 29 at 8:00 PM Eastern Daylight Time (UTC - 4). You can tune in via the 146.970 MHz Mt. Beacon repeater, PL 100.0 or via EchoLink on the N2EYH-L node. More info is available at: http://www.hvsatcom.org (Stu, WA2BSS)

[ANS thanks everyone for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office. And with that please keep in mind the two ham radio brothers called William and Wayne. Will was a CW operator and Wayne was a phone operator. Hams noticed they always went around together. If William went to the CW band, Wayne would be in the shack tuning the phone band. One ham noticed they were so inseparable. It was easy to explain, because where there's a Will there's a Wayne!

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

115. Weekly Highlights of Solar and Geomagnetic Activity, 22 - 28 August 2011

Newsgroup: rec.radio.amateur.space
Date: 2011-08-30 21:30:06 UTC
From: SWPC.Webmaster@noaa.gov
Message-ID: <20110830213001.E286433C8C@panix2.panix.com>
Source record: 341
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.info

```
:Product: Weekly Highlights and Forecasts
:Issued: 2011 Aug 30 1656 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
# Weekly Highlights and Forecasts
#
Highlights of Solar and Geomagnetic Activity
22 - 28 August 2011

Solar activity was at very low to low levels. Region 1271 (N16,
L=059, class/area Ehc/290 on 18 August) produced four low-level
C-class flares during the period. All other regions on the disk were
relatively stable and quiet. There were no Earth-directed CMEs
observed during the period.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at
normal to moderate levels during the entire period.

Geomagnetic field activity was at quiet to unsettled levels on 22 -
25 August due to a weak coronal hole high speed stream (CH HSS).
Activity decreased to mostly quiet levels for the remainder of the
period.

Forecast of Solar and Geomagnetic Activity
31 August - 26 September 2011

Solar activity is expected to be very low to low throughout the
forecast period.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is
expected to be at normal to moderate levels from 31 August - 03
September. The flux is expected to increase to moderate to high
levels during 04 - 09 September due to CH HSS effects. Normal to
moderate flux levels are expected during 10 - 11 September. A return
to moderate to high flux levels is expected on 13 - 14 September
following a second CH HSS. Normal to moderate levels are expected
from 15 - 25 September. Moderate to high flux levels are expected on
26 September due to effects of another CH HSS.
```

Geomagnetic field activity is expected to be at mostly quiet levels during 31 August - 02 September. Activity is expected to increase to quiet to unsettled levels, with isolated active periods, during 03 - 05 September as a CH HSS disturbs the field. Quiet levels are forecast for 06 - 10 September. An increase to quiet to unsettled levels is expected during 11 - 12 September due to another CH HSS. Predominately quiet levels are expected for the remainder of the period with the exception of 18 - 19 September and 24 - 25 September, when quiet to unsettled levels are expected due to recurrent CH HSS effects.

116. Crossposting Permitted to rec.radio.amateur.moderated

Newsgroup: rec.radio.amateur.space
Date: 2011-09-01 06:00:02 UTC
From: rram@panix.com
Message-ID: <radio/ham-radio/moderated/crossposting-1-1314856800@panix.com>
Source record: 342
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.info

```
Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/moderated/crossposting
Revision: 1.1 2009/04/12 19:42:04
Posting-Frequency: posted monthly
URL: http://www.panix.com/~rram/usenet/rram/index.html

Changes followed by "|".

After a 30-day public discussion and feedback period to gauge reader
opinions in March of 2009:

http://groups.google.com/group/rec.radio.amateur.moderated/browse_thread/thread/d7d337db35
f23326

the rec.radio.amateur.moderated Moderation Team has decided to consider
amending its charter, and permit limited simultaneous crossposting to
rec.radio.amateur.moderated and one other unmoderated
amateur-radio-related discussion newsgroup. We are currently trying
this on a temporary basis (90 days, through early July 2009), and adopt
it permanently if successful.

Approved rec.radio.amateur.* newsgroups are those that are currently
listed in the latest version of the "List of Big Eight Newsgroups" which
is crossposted monthly to news.announce.newgroups, news.groups, and
news.lists.misc.

Approved alt.radio.amateur.* and alt.ham-radio.* newsgroups are those
that have been created consistent with the suggestions in "So You Want
to Create an Alt Newsgroup" at:

http://www.faqs.org/faqs/alt-creation-guide/

Approved regional hierarchy newsgroups are those that contain either
"radio.amateur" or "ham-radio" in their names, including
uk.radio.amateur and aus.radio.amateur.misc.

We will make every reasonable effort to keep our list of approved
newsgroups up-to-date. In case we have overlooked any, and a submission
is rejected in error as a result, the rejected submitter can E-mail us
at our administrative contact address (in the signature at the bottom of
this article, and the default Reply-To for the rejection message)
requesting that it be added, and that the article be approved. We may
still choose to reject articles crossposted to any alt.* newsgroup with
an inappropriate name, including obscene language, embedded
name-calling, or encouragement of unlawful conduct.
```

Please direct any comments, questions, or criticisms to
rec-radio-amateur-moderated-request@panix.com.

117. ANS-247 AMSAT News Service Weekly Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2011-09-04 01:07:02 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <001701cc6a9e$efa6e110$cef4a330$@net>
Source record: 343
Cross-posted to: rec.radio.amateur.space,rec.radio.info

AMSAT NEWS SERVICE
ANS-247

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* Reminder: September 15 Deadline to Return Board of Directors Ballots
* ARISSat-1 LIVE Telemetry Web Page Now Operational
* Merritt Island High School ARISS Contact is Successful
* University of Alabama Students Test CubeSat Via Balloon Launch
* SDR-Radio Software Adds Support for AMSAT-UK FUNcube Dongle SDR
* Two Satellite Presentations Scheduled for California in September
* Satellite Shorts From All Over
* IARU Region 1 Meeting Addresses Interference to 2-Meter Satellite Band
* ESA Successfully Repressurizes Satellite With Solid State Stored Gas
* EduSat Mission to Test PocketQub Satellite Orbital Deployment System

SB SAT @ AMSAT $ANS-247.01
Reminder: September 15 Deadline to Return Board of Directors Ballots

AMSAT News Service Bulletin 247.01
>From AMSAT HQ SILVER SPRING, MD.
September 4, 2011
To All RADIO AMATEURS
BID: $ANS-247.01

Ballots for the AMSAT-North America 2011 Board of Directors election have been mailed to all members. To have your vote count you must return your ballot by mail to:

AMSAT-NA
850 Sligo Ave #600
Silver Spring, MD, 20910

Ballots must arrive at the AMSAT Office by the close of business, September 15, 2011.

Four director's terms expire this year:

Barry Baines, WD4ASW
Alan Biddle, WA4SCA
Drew Glasbrenner, KO4MA
Tony Monteiro, AA2TX

Seven nominations have been received for the open seats. Listed alphabetically they are:

Barry Baines, WD4ASW
Alan Biddle, WA4SCA
Steve Coy, K8UD
Drew Glasbrenner, KO4MA
Mark Hammond, N8MH
Tony Monteiro, AA2TX
Patrick E. Stoddard, WD9EWK

Select no more than four candidates on your ballot. The four candidates receiving the highest number of votes will be seated as full Board members for two year terms. The two candidates receiving the next highest number of votes will be seated as alternate Board members for one year terms.

[ANS thanks the AMSAT Office the above information]

/EX

SB SAT @ AMSAT $ANS-247.02
ARISSat-1 LIVE Telemetry Web Page Now Operational

AMSAT News Service Bulletin 247.02
>From AMSAT HQ SILVER SPRING, MD.
September 4, 2011
To All RADIO AMATEURS
BID: $ANS-247.02

ARISSatTLM software author, Douglas Quagliana, KA2UPW/5 says a new ARISSat-1/KEDR telemetry web page is now available at:

http://www.arissattlm.org/live

The new telemetry page is intended to be viewed on a computer (or large screen computing device). It shows all of the telemetry values that you would see if you were running ARISSatTLM at your station.

The data on this page is updated once a minute when ground stations are within range of ARISSat-1/KEDR and forwarding live telemetry received via ARISSatTLM. Since it depends on stations forwarding telemetry over the Internet, there will occasionally be periods without any updates.

The original ARISSat-1/KEDR telemetry page is still up and running. (see: http://www.arissattlm.org/mobile). The difference is that the "mobile" page is designed to be viewed on a cellphone or other small screen computing device.

Both pages are updated at the same time from the same telemetry. The "live" page just shows more telemetry.

Please keep forwarding in your telemetry over the Internet. Also, if you received any telemetry from ARISSat-1, even if you are forwarding, please email the .CSV file(s) to: [telemetry at arissattlm dot org]. The .CSV files are in the "Telemetry" folder which is in the ARISSatTLM folder on your desktop.

[ANS thanks Douglas Quagliana, KA2UPW/5 for the above information]

/EX

SB SAT @ AMSAT $ANS-247.03
Merritt Island High School ARISS Contact is Successful

AMSAT News Service Bulletin 247.03
>From AMSAT HQ SILVER SPRING, MD.
September 4, 2011
To All RADIO AMATEURS
BID: $ANS-247.03

Now up to 665 ARISS contacts from the ISS to school contacts the International Space Station school contact with Merritt Island High School, Merritt Island, Florida on August 30 added another success.

The contact was a direct link between NA1SS and WB2IHB. "NA1SS, NA1SS, NA1SS, this is WB2IHB in Merritt Island, Florida." Then, a crackle. "I read you loud and clear," said Japanese Astronaut Satoshi Furukawa. Fourteen-year-old Brandon Arena was first in line to ask Furukawa a question. So began the contact. The Florida Today newspaper reported on the event and the enthusiastic student response at:
http://www.floridatoday.com/apps/pbcs.dll/article?AID=2011108310317

The link above includes a video, and photos along with a report of the event that was well received by the students and their parents and teachers.

Merritt Island High is a public high school with a student population of 1500. Sixty of these students are members of the Da Vinci Academy of Aerospace Technology, where these engineering-minded students take part in the "Project Lead the Way" engineering curriculum. Fifteen students were selected from the Academy to engage the astronaut in a question and answer session as the ISS passed over the school.

ARISS is an international educational outreach program partnering the participating space agencies, NASA, Russian Space Agency, ESA, CNES, JAXA, and CSA, with the AMSAT and IARU organizations from participating countries.

ARISS offers an opportunity for students to experience the excitement of Amateur Radio by talking directly with crewmembers on-board the International Space Station. Teachers, parents and communities see, first hand, how Amateur Radio and crewmembers on ISS can ener-

gize youngsters' interest in science, technology, and learning.

Further information on the ARISS program is available on the website http://www.ariss.org/ (graciously hosted by the Radio Amateurs of Canada).

[ANS thanks ARISS PR Chairman David Jordan, AA4KN, and Florida Today for the above information]

/EX

SB SAT @ AMSAT $ANS-247.04
University of Alabama Students Test CubeSat Via Balloon Launch

AMSAT News Service Bulletin 247.04
>From AMSAT HQ SILVER SPRING, MD.
September 4, 2011
To All RADIO AMATEURS
BID: $ANS-247.04

The Space Hardware Club at the University of Alabama in Huntsville is student organization. They conceptualize, design, build, test and fly flight hardware for high altitude balloons, the CubeSat platform, and the CanSat competition.

UAHuntsville's Space Hardware Club's 15th BalloonSat mission was completed on August 26. Balloon and payloads were launched from the National Space Science and Technology Center (NSSTC) in Huntsville, Alabama. Payloads included a CubeSat radio test, a 900 MHz radio test, dual APRS tracking package on 2m and 70cm, and neutron detector collecting data for NSSTC.

Their YouTube videos of the launch can be viewed on-line at: http://tinyurl.com/3dkeqqt (southgatearc.org)

Additional information about the UAHuntsville Space Hardware Club can be found at: http://sites.google.com/site/uahshc/

[ANS thanks Southgate ARC News and the UAHuntsville Space Hardware Club for the above information]

/EX

SB SAT @ AMSAT $ANS-247.05
SDR-Radio Software Adds Support for AMSAT-UK FUNcube Dongle SDR

AMSAT News Service Bulletin 247.05
>From AMSAT HQ SILVER SPRING, MD.
September 4, 2011
To All RADIO AMATEURS
BID: $ANS-247.05

AMSAT-UK's FUNcube is an educational single cubesat project with the goal of enthusing and educating young people about radio, space, physics and electronics. FUNcube will carry a UHF to VHF linear transpon-

der that will have up to 1 watt and which can be used by Radio Amateurs worldwide for SSB and CW communications. Measuring just 10 x 10 x 10 cm, and with a mass of less than 1kg, it will be the smallest ever satellite to carry a linear transponder

It will support the educational Science, Technology, Engineering and Math (STEM) initiatives and provide an additional resource for the GB4FUN Mobile Communications Centre.

The target audience consists of primary and secondary school pupils and FUNcube will feature a 145 MHz telemetry beacon that will provide a strong signal for the pupils to receive.

A simple SDR receiver board (FUNcube Dongle) has been developed to support this mission by providing a simple radio interface to the classroom. The FUNcube Dongle connects to the USB port of a laptop to display telemetry and messages in an interesting way for students.

But, even before FUNcube has been launched amateur satellite operators have discovered that the 64 MHz to 1,700 MHz coverage of this Software Defined Radio receiver can be used for most amateur, along with some weather and commercial satellite reception.

This week, Simon Brown, GD4ELI/HB9DRV, announced he has enhanced his popular SDR-RADIO software to provide support for the AMSAT-UK FUNcube dongle software defined radio. The SDR-RADIO.com software has been upgraded to provide full support for the FUNcube dongle including satellite tracking, Doppler compensation and data for external rotator software via DDE. This free software can be downloaded from http://www.sdr-radio.com/

For more information on the FUNcube project please visit: http://www.funcube.org.uk

For the latest news on the FUNcube SDR dongle visit: http://www.funcubedongle.com/

You can join the FUNcube Yahoo Group at: http://uk.groups.yahoo.com/group/FUNcube/

[ANS thanks AMSAT-UK, Southgate ARC News, and Simon Brown for the above information]

/EX

SB SAT @ AMSAT $ANS-247.06
Two Satellite Presentations Scheduled for California in September

AMSAT News Service Bulletin 247.06
>From AMSAT HQ SILVER SPRING, MD.
September 4, 2011
To All RADIO AMATEURS
BID: $ANS-247.06

Clint Bradford, K6LCS will have two "How to Work the Amateur FM Satellites With Your HT" presentations in September.

Sonoma County Radio Amateurs General Meeting

Wednesday, September 7, 2011 - 7:00PM
Luther Burbank Art & Garden Center
2050 Yulupa Avenue, Santa Rosa CA 95405

AMSAT area coordinator Clint Bradford, K6LCS, will be presenting his "Working Amateur Satellites With Your HT" session at the September 7, 2011 meeting of the Sonoma County Radio Amateurs. ALL are welcome to attend.

"The Sonoma County club has been serving their region for more than SEVENTY years," writes Clint. "I am really looking forward to meeting the group!"

Clint's in Southern California - but has prepared a custom slideshow for the Sonoma County club, which will be displayed live at the meeting, as Skype handles the session's audio. "I'd much rather be there in person - but this arrangement has worked quite successfully in the past. We'll have a great time!"

Attendees should visit Clint's Web site ahead of time at ... http://www.work-sat.com ... and download the four-page .pdf tutorial. Clint welcomes pre-presentation questions - call him at 909-241-7666 (cell) or send email to clint@clintbradford.com .

ARRL Southwestern Division Convention

Saturday, September 10, 2011 - Noon
Marriott Torrance South Bay: 3635 Fashion Way, Torrance, CA 90503

Clint says, "We have tentative passes of SO-50, ARISSat-1, AO-27, and AO-51 throughout the day Saturday - Watch for the exact times at the check-in table! Clint will be presenting his "Working Satellites With Your HT" at Noon in Suites 9-11.

Additional Presentation Resources

Clint Bradford, K6LCS, has given his "How to Work the FM Ham Satellites With Your HT" presentation more than 60 times the past three years - and knows how to motivate and educate his audiences. He has just created a Web page that describes how others can make THEIR presentations informative, effective, and - most importantly - FUN for audiences ...

http://web.me.com/clintbradford/Work-Sat/Presentations.html

Just written this week, but Clint will be including "tips and techniques" from professional presenters - such as Bill Gates, Steve Jobs, and others - as this Web page grows in the next few weeks.

[ANS thanks Clint Bradford, K6LCS for the above information]

/EX

SB SAT @ AMSAT $ANS-247.07
Satellite Shorts From All Over

AMSAT News Service Bulletin 247.07
>From AMSAT HQ SILVER SPRING, MD.
September 4, 2011
To All RADIO AMATEURS
BID: $ANS-247.07

+ This is a reminder to those who use Twitter about a service called @twisst, which you can use to notify you when the International Space Station is going to be passing overhead in your region. It pulls your location from your profile, and then calculates good viewing times for you to see the station. All you have to do is follow the Twitter account: http://twitter.com/#!/twisst

+ A nice photograph of northwestern Europe at night, as seen from the International Space Station on August 10, 2011 can be viewed at: http://www.universetoday.com/wp-content/uploads/2011/08/from-space.jpg The landscape is dotted with clusters of lights from individual urban areas; visible are London, Paris, Brussels, Milan and Amsterdam, which stand out due to their large light "footprints," while the English Channel is completely dark. To give a sense of scale, the centers of the London and Paris metropolitan areas are approximately 340 kilometers (210 miles) from each other.

+ Read the story at http://tinyurl.com/3etozte (UniverseToday.com) about why the Large Hadron Collider will not destroy the Earth and you'll have something to talk about on 75M if the other guy gets stuck on the weather and the state of his gallbladder.

+ Outgoing space shuttle Program Manager John Shannon has received an assignment to carry out an independent assessment of competing options for eventual manned missions beyond low-Earth orbit. Read the story at: http://spaceflightnow.com/news/n1108/29shannon/

+ EE Times - ARISSat Blog now has the sixth and seventh entries in EE (Electronic Engineering) Times "Chips in Space" blog about ARISSat-1:
Chips in Space: Let's look inside ARISSat-1 (part 2)
http://tinyurl.com/4y2tn8g (eetimes.com)
Chips in Space: Let's look inside ARISSat-1 (Part 3)
http://tinyurl.com/3hffv3v (eetimes.com)

+ Edge Of Space Sciences will be flying three high altitude balloons for NOAA on Saturday September 10th at 6:50 AM MDT (UTC - 6) out of Windsor, Colorado, USA. Payload weight of 20+ Lbs flying NOAA Aircore's. EOSS flight numbers 168, 169 and 170 will be a mix of two 3000 and one 2000 gram helium balloons. Mission details can be found on their web page: http://www.eoss.org/flight/index.html

+ Steer the kids over to http://spaceplace.nasa.gov/ where they can learn about astronomy, the solar system, galaxies, the Earth at

a fun level. Hundreds of interactive pages let them play scientific video games, print pictures to color, visit space image galleries, make creative scientifc projects at home.

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-247.08
IARU Region 1 Meeting Addresses Interference to 2-Meter Satellite Band

AMSAT News Service Bulletin 247.08
>From AMSAT HQ SILVER SPRING, MD.
September 4, 2011
To All RADIO AMATEURS
BID: $ANS-247.08

The International Amateur Radio Union (IARU) Region 1 meeting in Sun City, South Africa this week noted that several Italian repeaters are currently causing on-going interference to satellite uplinks and down-links in the Amateur Satellite Service segment from 145.8-146.0 MHz.

While the IARU R1 decision stressed the importance of the satellite service they also noted that coordination is needed to continue to introduce new modes. The IARU R1 C5 committee report recommended that the D-STAR repeaters/nodes that continue operation in contra-diction to the IARU-R1 band plans be disconnected from the inter-national D_STAR network.

The IARU-R1 Sun City conference SC11_C5_16 committee meeting notes say that initial methods listed below were passed unanimously:

1. Write the repeater operator to remove [their operating frequency] out of the satellite segment.
2. Inform the trust server operator of the IARU bandplan breach made by the use of the repeater.
3. Inform the government about the repeater and request them to remove the repeater.

[ANS thanks Trevor, M5AKA for the above information]

/EX

SB SAT @ AMSAT $ANS-247.09
ESA Successfully Repressurizes Satellite With Solid State Stored Gas

AMSAT News Service Bulletin 247.09
>From AMSAT HQ SILVER SPRING, MD.
September 4, 2011
To All RADIO AMATEURS
BID: $ANS-247.09

The European Space Agency reported that its August 16 test to re-pressurize gas tanks aboard their Proba-2 spacecraft were successful.

Proba-2 was launched on 2 November 2009. Less than a cubic metre in volume, it carries a total of 17 new technologies and four science payloads focused on the Sun and space weather.

According to the ESA, Proba-2 uses a 'resistojet' engine to maintain the microsatellite's orbit at 600 km altitude. This experimental engine runs on xenon gas heated before ejection to provide added thrust.

Laurens van Vliet of Dutch research organisation TNO, which developed the technology explained, "What makes this repressurisation unique is that the added gas was not stored in a pressurised state but produced from a solid material at room temperature, the first of four 'cool-gas generators' on Proba-2. Nitrogen, like xenon, is an inert, non-reactive gas, so the resistojet can work just as well with a xenon-nitrogen mixture."

The bottle-shaped cool-gas generators are filled with a rigid solid material that, once triggered, produces more than 250 times its own volume in pure nitrogen gas. The other three generators will be used later in Proba-2's orbital lifetime.

The original story was published by SpaceDaily.com on their web: http://tinyurl.com/3rfg4fj (SpaceDaily.com)

[ANS thanks SpaceDaily.com for the above information]

/EX

SB SAT @ AMSAT $ANS-247.10
EduSat Mission to Test PocketQub Satellite Orbital Deployment System

AMSAT News Service Bulletin 247.10
>From AMSAT HQ SILVER SPRING, MD.
September 4, 2011
To All RADIO AMATEURS
BID: $ANS-247.10

The PocketQub is a new satellite standard that was proposed in 2009 by Professor Robert Twiggs, W7RMT at Kentucky's Morehead State University (MSU) for a satellite even smaller than the CubeSat. PocketQubs are 5 cm cubes and can literally fit in a pocket. The PocketQub leverages the CubeSat standard and the revolution in the miniaturization of electronics. PocketQubs will ultimately have a wide range of applications including: Network Nodes, Sensor Systems, Satellite Constellations, Inexpensive, Redundant, and Spatially Organized Earth Remote Sensing Platforms.

Morehead State University's Space Science Center (SSC) and Kentucky Space collaborated with the University of Rome Sapienza Aerospace Engineering School on a series of student-driven educational satellite projects. The goal was for students to develop, build and fly a series of four satellites (EduSat, UNISAT-5, UNISAT-6, and UNISAT-7). These satellites were built in Rome and in Morehead and

controlled from MSU by students using the big dish antenna and by
Italian students using satellite ground assets in Europe.

EduSat was launched in August, 2011 by a Russian Dnepr rocket from
a silo. During its first 30-days on orbit, EduSat will test an orb-
ital deployer designed to release the PocketQub, also called a femto-
class satellite. While the femtosats will not be released on the
first mission, the deployment system that will ultimately deploy
them will be tested. A follow-on mission in 2012 (UNISAT-5) will
deploy four femto-class satellites when they are ejected from the
UNISAT-5 "mothership" at apogee.

The original story was published by SpaceDaily.com on their web:
http://tinyurl.com/3mgrbkw (SpaceDaily.com)

[ANS thanks SpaceDaily.com for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the
President's Club. Members of the President's Club, as sustaining donors
to AMSAT Project Funds, will be eligible to receive additional benefits.
Application forms are available from the AMSAT Office. And with that,
please keep in mind the ham while visiting his friend at the hospital
pointed to a machine with all sorts of tubes, knobs, lights, and beep-
ers and said, "Wow, I sure wouldn't like being hooked up to that!"
The nurse answered, "Me neither, that's the floor cleaning machine!"

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

118. KATRINA KAIF RARE PHOTOS

Newsgroup: rec.radio.amateur.space
Date: 2011-09-04 02:53:15 UTC
From: devi <satyamsivam9030@gmail.com>
Message-ID: <33353518-b365-4a37-afb6-1bffb1e966a1@r8g2000prd.googlegroups.com>
Source record: 344

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119. list of available manuals

Newsgroup: rec.radio.amateur.space
Date: 2011-09-04 14:42:21 UTC
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solutions manual Thermal Environmental Engineering Kuehn Ramsey Threlkeld 3
solutions manual Thermodynamics Concepts and Applications Turns
solutions manual Thermodynamics: An Engineering Approach cengel 6
solutions manual Thermodynamics: An Engineering Approach cengel Boles 7
solutions manual Traffic Engineering Roess Prassas McShane 4
solutions manual Traffic and Highway Engineering Garber Hoel 3
solutions manual Traffic and Highway Engineering Garber Hoel 4
solutions manual Transportation Engineering and Planning Papacostas Prevedouros 3

solutions manual Transportation Engineering: An Introduction Khisty Lall 3
solutions manual Transportation Infrastructure Engineering: A Multimodal Integration Hoel Garber Sadek 1
solutions manual Understanding Business Nickels McHugh McHugh 8
solutions manual Understanding Business Nickels McHugh McHugh 9
solutions manual Understanding Corporate Annual Reports Pasewark 7
solutions manual Understanding and Managing Organizational Behavior George 5
solutions manual Understanding Business Strategy Concepts and Cases Ireland 2
solutions manual Understanding Financial statements Fraser 7
solutions manual Understanding Financial Statements Fraser 8
solutions manual Understanding Financial Statements Ormiston Fraser 9
solutions manual University Chemistry Laird
solutions manual Unit Operations and Processes in Environmental Engineering Reynolds Richards 2
solutions manual Unit Operations of Chemical Engineering McCabe 6
solutions manual Unit Operations of Chemical Engineering McCabe Smith Harriott 7
solutions manual Unified Design of Steel Structures Geschwindner 1
solutions manual University Physics with Modern Physics Young Freedman 13
solutions manual Urban transportation planning Meyer Miller 2
solutions manual Using and Understanding Mathematics A Quantitative Reasoning Approach Bennett 4
solutions manual Using MIS Kroenke 2
solutions manual Water Treatment: Principles and Design MWH 2
solutions manual Water and Wastewater Engineering Davis 1
solutions manual Water and Wastewater Technology Hammer Hammer 6
solutions manual Water and Wastewater Technology Hammer Hammer 7
solutions manual Water Reuse : Issues, Technologies, and Applications Metcalf Asano Burton Leverenz Tsuchihashi Tchobanoglous 1
solutions manual Water Chemistry Benjamin
solutions manual Water Resources Engineering Chin 2
solutions manual Water Resources Engineering Wurbs James
solutions manual Water Resource Mays 2
solutions manual Water Supply and Pollution Control Viessman Hammer Perez Chadik 8
solutions manual West Federal Taxation 2008 Comprehensive Willis 31
solutions manual West Federal Taxation 2008 Corporations, Partnerships, Estates, and Trusts Hoffman 31
solutions manual West's Business Law Clarkson 10
solutions manual Venture Capital and the Finance of Innovation Metrick 2
solutions manual Viscous Fluid Flow White 3
solutions manual Window on Humanity A Concise Introduction to Anthropology Kottak 3

120. WSR-248 AMSAT Weekly Satellite Report

Newsgroup: rec.radio.amateur.space
Date: 2011-09-05 17:33:19 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <000c01cc6bf1$deb424e0$9c1c6ea0$@net>
Source record: 346
Cross-posted to: rec.radio.amateur.space,rec.radio.info

```
This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-248.S1
WSR 248 Part 1 09/05/2011

AMSAT NEWS SERVICE BULLETIN 248.S1
FROM AMSAT HQ SILVER SPRING, MD, September 05, 2011
TO ALL RADIO AMATEURS
BID: $WSR-248.S1

ARISSat-1 (Radioskaf-b) (Kedr)
Catalog number: 37772
Launch date: August 03, 2011 1843z
Launch site: International Space Station

Status: Operational

Callsign: RS01S

Current Mode(s):
Linear Transponder: U/v
Uplink: 435.758 to 435.742 MHz CW/LSB
Downlink: 145.922 to 145.938 MHz CW/USB

FM Telemetry/SSTV/Messages/ID:
Downlink: 145.950 MHz FM

Telemetry/Beacon:
Downlink: 145.939 MHz CW1
145.919 MHz CW2
145.920 MHz 1k BPSK USB
145.920 MHz 400b BPSK USB

Official Webpage:http://www.amsat.org/amsat-new/ARISSat/ARISSat.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/informal_detail.php?serialnum=89
[08112011]
=====
SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009 1555z
```

Launch site: Baikonur, Kazakhstan

Status: By schedule

Callsign: ZS0SUM

Uplink: 145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=88
[02092011]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=68
[02092011]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05, 2005 0444z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.9360 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=30

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[02092011]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004 0745z
Launch site: Baikonur, Kazakhstan

Status: Semi-operational - IHU crash each eclipse

Current Mode(s):
Voice repeater: V/u
Uplink: 145.880 MHz FM
Downlink: 435.150 MHz FM

Telemetry: Recovery efforts
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.880 MHz FM
145.920 MHz FM
145.920 MHz FM - 67 Hz PL tone burst
1268.705 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.703 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=19
[06162011]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002 1700z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4
Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the re-
peater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
the 10 minute timer.
[02092011]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
145.870 MHz FM
145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK

Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[06232011]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993 0140z
Launch site: Kourou, French Guiana

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[02092011]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974
Launch site: Vandenberg AFB, California, USA

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
145.975 to 145.925 MHz CW/USB Mode B (8W PEP)

145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
145.972 MHz CW
435.100 MHz CW
2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02092011]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
Kourou, French Guiana
Uchinoura Space Center, Japan
Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - OFF
APRS - OFF
SSTV - OFF

Expedition 28 Crew (May - September 2011):
Commander: Andrey Borisenko
Flight Engineer: Ron Garan KF5GPO
Flight Engineer: Alexander Samokutyaev
Flight Engineer: Satoshi Furukawa
Flight Engineer: Sergey Volkov KE5DAW
Flight Engineer: Micheal Fossum KF5AQG

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[07282011]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-248.S2
WSR 248 Part 2 09/05/2011

AMSAT NEWS SERVICE BULLETIN 248.S2
FROM AMSAT HQ SILVER SPRING, MD, September 05, 2011
TO ALL RADIO AMATEURS
BID: $WSR-248.S2

O/OREOS
Catalog Number: 37224
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.035 MHZ AX.25

Beacon:

Callsign:

URL: http://www.ooreos.org/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=146
[02092011]
=====

Rax-1 Radio Aurora Explorer
Catalog Number: 37223
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.505 MHz 9k6 GMSK

Beacon:

Callsign: RAX-1

URL: http://rax.engin.umich.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=165
[02092011]
=====
FO-69 Fastrac-1 Sara Lily
Catalog Number: 37227
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Operational

Uplink 1: 145.980 MHz 1k2 baud
Uplink 2: 145.825 MHz 1k2 baud
Downlink: 437.345 MHz 1k2 and 8k6 baud

Beacon: 437.435 MHz 1k2 AX.25

Callsign: Fast1

URL: http://fastrac.ae.utexas.edu/index.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=83
[07052011]
=====
FO-70 Fastrac-2 Emma
Catalog Number: 37380
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Operational

Uplink 1: 435.025 MHz 1k2 baud
Uplink 2: 437.435 MHz 9k6 baud
Downlink: 145.825 MHz

Beacon: 145.825 MHz 1k2 AX.25

Callsign: Fast2

URL: http://fastrac.ae.utexas.edu/index.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=84
[07052011]
=====
StudSat
Catalog Number: 36796
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink: 437.505MHz, 9600bps FSK
Downlink: 437.505MHz, 9600bps FSK
Beacon : 437.505MHz, 20bps ASK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=164
[02092011]
=====
TIsat-1
Catalog Number: 36799
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On orbit

Callsign: HB9DE

Uplink: 145.980MHz FM, AFSK
Downlink: 437.305MHz FM, AFSK
Beacon: 437.305MHz CW

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=118
[02092011]
=====
HO-68 HOPE-1 (CAS-1)(XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009 0231z
Launch site: Taiyuan Space Center, PRC

Status: Beacon only

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
145.9250 - 145.9750 MHz SSB/CW
145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
435.7650 - 435.7150 MHz SSB/CW
435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=108

For more information about XW-1 (CAS-1):
http://
[08112011]
=====
SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w): 437.5050MHz FSK 1k2bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=109
[02092011]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
437.3850 MHz FSK 9k6bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=110
[02092011]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=113

[02092011]
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
Beacon(500mw): 436.000MHz GMSK 9k6bp
[02092011]
=====
CP-6
Catalog Number: 35003
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: Operational

Downlink: 437.365 MHz 1k2 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=121
[02092011]
=====
HAWKSAT 1
Catalog number: 35004
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: operational

Downlink: 437.345 MHz ?

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=105
[02092011]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: Operational

Downlink: 437.465 MHz 1k2 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=94
[02092011]

=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009 0115z
Launch Site: Satish Dhawan Space Centre, India

Status: ?

Downlink: 435.000 MHz
Uplink: 145.800 MHz

Telemetry: 137.400 MHz
[02092011]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon: 437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=101
[02092011]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: In Orbit

Downlink: 437.375 MHZ FSK9k6/CW
Beacon: 437.375 MHz FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[02092011]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
437.465 MHz FM/CW
Beacons: 437.305 MHz FM/CW
437.275 MHz FM/CW

Callsigns: JR5YBN
JR5YBO

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[02092011]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Downlink: 437.455 MHz AFSK/CW
Beacon: 437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[20092011]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon: 437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[02092011]

=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008 1520z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Curent Modes: Telemetry
Audio
Images

Downlinks: 435.315 MHz
435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02092011]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web
page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=46
[02092011]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=60

[02092011]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational ?

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL
=/satellites/status.php
[07052011]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Current Mode: dependant on last received command

Uplink: 145.980 MHz FM
Downlink: 437.275 Mhz CW
437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[06162011]
=====
CO-66 Seeds II

Catalog number:
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web
page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL
=/satellites/status.php
[02092011]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=72
[02092011]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=74
[02092011]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005 0652z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=37
[02092011]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: ?????

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[02092011]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004 0745z
Launch site: Baikonur, Kazakhstan

Status: Semi-operational - IHU crash each eclipse

Current Mode(s):
Voice repeater: V/u
Uplink: 145.880 MHz FM
Downlink: 435.150 MHz FM

Telemetry: Recovery efforts
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.880 MHz FM
145.920 MHz FM
145.920 MHz FM - 67 Hz PL tone burst
1268.700 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.708 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=19
[06162011]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[02252011]
=====
CO-55 Cute-1.7+APD II
Catalog Number: 27844
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Current Mode: CW downlink worldwide
AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=78
[02092011]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001 0240z
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[02092011]
=====
RS-22 RADIO SPORT 22 (MOZHAYETS 4)
Catalog number: 27939
Launch Date: September 27, 2003 0612z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02092011]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990
Launch site: Kourou, French Guiana

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
145.860 MHz 1200-baud Manchester FSK
145.880 MHz 1200-baud Manchester FSK
145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[02092011]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984
Launch site: Vandenburg AFB, California, USA

Status: Operational ?

Current Mode: /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz
Mode-S Beacon: 2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[07052011]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)

Launch sites: Baikonur, Kazakhstan
Kourou, French Guiana
Uchinoura Space Center, Japan
Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - OFF
APRS - OFF
SSTV - OFF

Expedition 28 Crew (May - September 2011):
Commander: Andrey Borisenko
Flight Engineer: Ron Garan KF5GPO
Flight Engineer: Alexander Samokutyaev
Flight Engineer: Satoshi Furukawa
Flight Engineer: Sergey Volkov KE5DAW
Flight Engineer: Micheal Fossum KF5AQG

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[07282011]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-248.S3
WSR 248 Part 3 09/05/2011

AMSAT NEWS SERVICE BULLETIN 248.S3
FROM AMSAT HQ SILVER SPRING, MD, September 05, 2011
TO ALL RADIO AMATEURS
BID: $WSR-248.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NANOSAIL-D
Catalog Number:
Ejection Date: January 17, 2011

Status: On orbit

Downlink: 437.270 MHz AX.25

URL: http://nanosaild.engr.scu.edu/dashboard.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=115
[01272011]
=====
CP4
Catalog Number: 31132
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=79
[09062010]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=76
[09062010]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=51
[09062010]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.250

Official Website: http://www.ncube.no

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=24
[09062010]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink 2401.835 MHz 38k4 packet

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=54
[09062010]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=53
[09062010]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks: 145.850 MHz
145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====

SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks

V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON General Beacon(GB) Middle Beacon(MB) Engineering Beacon(EB)
2 m none 145.898 MHz none
70cm 435.438 MHz 435.588 MHz 435.838 MHz
13cm(1) 2400.188 MHz 2400.338 MHz 2400.588 MHz
13cm(2) 2401.173 MHz 2401.323 MHz 2401.573 MHz
3cm 10450.975 MHz 10451.125 MHz 10451.375 MHz
1.5cm 24047.885 MHz 24048.035 MHz 24048.285 MHz
[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
145.890 FM
145.930 FM
1269.700 FM
1269.800 FM
1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[07172010]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink: 435.1380 MHz AFSK 1200 BPS
Downlink: 435.2060 MHz AFSK 1200 BPS
Uplink: 145.8150 MHz AFSK 1200 BPS
Uplink: 145.8350 MHz AFSK 1200 BPS
Uplink: 145.8550 MHz AFSK 1200 BPS
Uplink: 145.8750 MHz AFSK 1200 BPS
[06042009]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks: 145.875 MHz FM 1200-baud
145.900 MHz FM 1200-baud
145.925 MHz FM 1200-baud
145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink: 435.0625 MHz FM 1k2bps AFSK
435.1125 MHz FM 1k2bps AFSK
435.1375 MHz FM 1k2bps AFSK
Downlink: 145.9750 MHz FM 1k2bps AFSK
2446.5025 MHz FM 1k2bps AFSK

Beacon: 2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink: 435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons: 435.795 MHz CW
435.910 MHz AX25

Voice Transponder:
Uplink: 145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks: 145.850 MHz
145.870 MHz
145.890 MHz
145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode: V/u

Uplink: 145.900 MHz FM 1200-baud Manchester FSK (reserved)
145.920 MHz FM VOICE
145.940 MHz FM 1200-baud Manchester FSK (reserved)
145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink: 437.026 MHz USB VOICE
(1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink: 145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink: 145.8500 MHz MFSK 1200 BPS
Uplink: 145.8700 MHz MFSK 1200 BPS
Uplink: 145.8900 MHz MFSK 1200 BPS
Uplink: 145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.8500 - 145.9000 MHz SSB/CW
Downlink 29.4000 - 29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink: 29.4500 - 29.5500 MHz SSB/CW

Beacons: 29.450 MHz
435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink: 145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB

Beacon 1: 29.352 MHz (intermittent)
Beacon 2: 29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12

Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-248.S4
WSR 248 Part 4 09/05/2011

AMSAT NEWS SERVICE BULLETIN 248.S4
FROM AMSAT HQ SILVER SPRING, MD, September 05, 2011
TO ALL RADIO AMATEURS
BID: $WSR-248.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Re-entered
Re-entered: October 25, 2009

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=56
[09062010]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 437.325 MHz 9k6 GMSK
437.325 MHz CW 20wpm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=117
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 436.250 MHz 9k6 FHSS
[11112009]
=====
Pollux
Catalog Number: 35693
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=139
[09062010]
=====
Castor (ANDE-2)
Catalog Number: 35694
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=144
[09062010]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=59
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Re-Entered
Re-entered date: August 8, 2010

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[08082010]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at} amsat.org
NNNN
/EX

121. Weekly Highlights of Solar and Geomagnetic Activity, 29 August - 04 September 2011

Newsgroup: rec.radio.amateur.space
Date: 2011-09-06 21:30:07 UTC
From: SWPC.Webmaster@noaa.gov
Message-ID: <20110906213001.D529E33C9A@panix2.panix.com>
Source record: 347
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.info

```
:Product: Weekly Highlights and Forecasts
:Issued: 2011 Sep 06 2004 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
# Weekly Highlights and Forecasts
#
Highlights of Solar and Geomagnetic Activity
29 August - 04 September 2011

Solar activity began the week at low levels with 27 C-class flares
between 09 August - 03 September and ended at moderate levels with
an M3 flare at 04/1145 UTC from Region 1286 (N20, L=304, class/area
Dso/080 on 03 September). The M3 event was associated with a
partial-halo coronal mass ejection which was directed away from the
west limb. Although Region 1282 (N25, L=300, class/area Eso/170) did
not produce any significant activity during the period, it did
develop a delta magnetic configuration on 03 September. Region 1283
(N14, L=223, class/area Dsi/220) developed into the largest spot
group during the period.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at
normal levels.

Geomagnetic field activity began the week at generally quiet to
unsettled levels with isolated active and minor storm periods at
high latitudes due to a negative polarity coronal hole high speed
stream (CH HSS). Activity decreased to mostly quiet levels for 30
August - 02 September. Activity increased to quiet to unsettled
levels with isolated active periods at high latitudes for 03 - 04
September. An isolated major storm period occurred at high latitudes
during 03/0900 - 1200 UTC. Solar wind data indicated a solar sector
boundary crossing on 02 September at about 1000 UTC, and a
co-rotating interaction region on 03 September at about 0100 UTC
followed by a negative polarity CH HSS.

Forecast of Solar and Geomagnetic Activity
07 September - 03 October 2011

Solar activity is expected to be low with M-class activity likely
and a slight chance for X-class activity through 11 September when
```

Region 1283 rotates off the disk. A decrease to very low to low levels is expected from 12 - 17 September. An increase to low to moderate levels is expected as old Regions 1286 and 1283 return and transit the disk from 18 September through the remainder of the forecast period.

A slight chance for proton events is expected at geosynchronous orbit until 12 September.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at high levels 07 - 08 September, followed by normal to moderate levels for 09 - 12 September. High levels are expected 13 - 14 September, followed by another decrease to normal to moderate levels for 15 - 28 September. High levels resume 29 - 30 September. Normal to moderate levels are expected 01 - 03 October.

Geomagnetic field activity is expected to be at mostly quiet levels through 09 September. Activity is expected to increase to unsettled to active levels 10 - 13 September with the arrival of a coronal mass ejection coupled with a CH HSS. Mostly quiet levels will prevail from 14 - 29 September. An increase to unsettled is expected 30 September - 01 October due to another recurrent CH HSS. Quiet levels will predominate for 02 - 03 October.

122. Radio Meteor Obs. Bull. August 2011 Perseids

Newsgroup: rec.radio.amateur.space
Date: 2011-09-07 20:16:46 UTC
From: Chris Steyaert <observations@rmob.org>
Message-ID: <57kf67dekbpvebrp17lc78jt9nkv1q6um3@4ax.com>
Source record: 348
Cross-posted to: rec.radio.amateur.space,sci.astro.amateur

Radio Meteor Observation Bulletin No. 217 of August 2011 (74 K) is available now as

http://www.rmob.org/rmobtext/rmob1108.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

Chris

123. ANS-254 AMSAT News Service Weekly Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2011-09-12 18:35:58 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <001201cc717a$cae62150$60b263f0$@net>
Source record: 349
Cross-posted to: rec.radio.amateur.space,rec.radio.info

AMSAT NEWS SERVICE
ANS-254

ANS is a free, weekly, news and information service of AMSAT North America, The
Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* Final Call for AMSAT-NA Board of Directors Ballots
* Registration Open for 2011 AMSAT Space Symposium 4-6 November 2011
* STRaND-1 Frequency Coordinated
* Louis Varney G5RV Cup
* KiwiSAT Students Win Grant
* OSCAR-11 Report 01 September 2011
* 5.7 Metric Ton Satellite Uncontrolled Re-Entry Expected Soon
* Satellite Shorts From All Over
* ARISS Status - 5 September 2011

SB SAT @ AMSAT $ANS-254.01
Final Call for AMSAT-NA Board of Directors Ballots

AMSAT News Service Bulletin 254.01
From AMSAT HQ SILVER SPRING, MD.
September 11, 2011
To All RADIO AMATEURS
BID: $ANS-254.01

Ballots for the AMSAT-North America 2011 Board of Directors election have been mailed to all members. To have your vote count you must return your ballot by mail to:

AMSAT-NA
850 Sligo Ave #600
Silver Spring, MD, 20910

Ballots must arrive at the AMSAT Office by the close of business, September 15, 2011.

Four director's terms expire this year:

Barry Baines, WD4ASW
Alan Biddle, WA4SCA
Drew Glasbrenner, KO4MA
Tony Monteiro, AA2TX

Seven nominations have been received for the open seats. Listed alphabetically they are:

Barry Baines, WD4ASW
Alan Biddle, WA4SCA
Steve Coy, K8UD
Drew Glasbrenner, KO4MA
Mark Hammond, N8MH
Tony Monteiro, AA2TX
Patrick E. Stoddard, WD9EWK

Select no more than four candidates on your ballot. The four candidates receiving the highest number of votes will be seated as full Board members for two year terms. The two candidates receiving the next highest number of votes will be seated as alternate Board members for one year terms.

[ANS thanks the AMSAT Office the above information]

/EX

SB SAT @ AMSAT $ANS-254.02
Registration Open for 2011 AMSAT Space Symposium 4-6 November 2011

AMSAT News Service Bulletin 254.02
From AMSAT HQ SILVER SPRING, MD.
September 11, 2011
To All RADIO AMATEURS
BID: $ANS-254.02

AMSAT announces the 2011 AMSAT Space Symposium will be held on Friday, November 4th through Sunday, November 6th in San Jose, CA. Our annual gathering will feature:

+ Space Symposium with Amateur Satellite Presentations
+ Operating Techniques, News, & Plans from the Amateur Satellite World
+ Board of Directors Meeting open to AMSAT members (Nov. 3-4)
+ Meet Board Members and Officers
+ Annual General Membership Meeting
+ Annual Banquet-Keynote Speaker and Door Prizes

The 2011 Symposium hotel and registration web pages are now available on the AMSAT web site. You may register for the Symposium and Annual Banquet at the AMSAT Store:
http://www.amsat-na.com/store/SymposiumReg.php

Visit the Symposium and Annual General Meeting web page for details and the latest information:
http://www.amsat.org/amsat-new/symposium/2011/index.php

Symposium Registration including a copy of the Proceedings is:
+ $45 per person until September 19, 2011
+ $50 per person starting September 20, 2011
+ $55 per person at the door

The Saturday evening banquet is $45 per person. The Sunday morning Area Coordinator's Breakfast is $15 per person.

The hotel selected is the Wyndham San Jose, close to the airport. The AMSAT discount rate is $79.00+taxes per night. The reservation block code when calling the hotel directly is "AMSAT". The hotel telephone number is 408-453-6200. If you are making reservations on-line use 1031FSJAM for the group code. The direct link to the hotel web page is: http://www.wyndham.com/hotels/SJCAP/main.wnt

If you are planning to book a room on dates other than November 2, 3, 4, 5, you will have to call the hotel directly and ask for *in-house reservations*. You can get the $79 rate 3 days before and 3 days after the above dates but you cannot book the room on their website. Any problems, give Martha a call at the AMSAT Office: 301-589-6062.

[ANS thanks the 2011 Symposium Committee for the above information]

/EX

SB SAT @ AMSAT $ANS-254.03
STRaND-1 Frequency Coordinated

AMSAT News Service Bulletin 254.03
From AMSAT HQ SILVER SPRING, MD.
September 11, 2011
To All RADIO AMATEURS
BID: $ANS-254.03

The IARU Satellite Frequency Coordination Panel has recently agreed a frequency of 437.575 MHz for the UK CubeSat STRaND-1. It will carry a Smartphone and plans to have a UOSAT style speech synthesiser and a 9600 or 19200 bps AX.25 packet downlink.

STRaND-1 is a 3U CubeSat measuring 30 by 10 by 10 cm and weighing 4 kg. Unlike previous CubeSats it will feature full 3-axis control with the attitude an orbit control system comprising a nano-magnetorquer, nano-reaction wheels, GPS receiver, 8 pulse plasma thrusters and a butane thruster.

A six page article on STRaND-1 appeared in the Spring issue of OSCAR News available at http://www.uk.amsat.org/on_193_final.pdf

The video of the presentation on the STRaND-1 Smartphone CubeSat given by Shaun Kenyon to the AMSAT-UK Colloquium is at http://www.batc.tv/vod/Strand.flv

The PDF of the PowerPoint slides is at http://www.uk.amsat.org/wp-content/uploads/colloquium%202011/AMSAT-UK-STRaND

-
Presentation.pdf

AMSAT-UK: http://www.uk.amsat.org/

[ANS thanks Trevor, M5AKA, for the above information]

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SB SAT @ AMSAT $ANS-254.04
Louis Varney G5RV Cup

AMSAT News Service Bulletin 254.04
From AMSAT HQ SILVER SPRING, MD.
September 11, 2011
To All RADIO AMATEURS
BID: $ANS-254.04

The Louis Varney G5RV Cup for Space Communications has been awarded to Paul Robinson 2E1EUB by RSGB president Dave Wilson M00BW.

The cup is awarded for advances in space communication and the presentation took place at the Telford Hamfest on Sunday, September 4.

Paul was nominated by AMSAT-UK for his work promoting and encouraging the use of amateur radio satellites and perfecting the art of a portable ground station.

Paul comments that he is privileged to have his call sign and name on the cup alongside some very famous call signs, some of which are no longer with us, he would like to thank AMSAT-UK and the RSGB for this award.

AMSAT-UK publishes a colour A4 newsletter, OSCAR News, which is full of Amateur Satellite information. A sample edition can be seen at: http://www.uk.amsat.org/on_193_final.pdf

Join online at http://tinyurl.com/JoinAMSAT-UK

http://www.uk.amsat.org/2011/09/05/louis-varney-g5rv-cup/

Paul is well known for his mobile 2M1EUB satellite operations in Interesting and wild locations such on an island off the Scottish Coast. Photos and additional information about Paul's rover and solar-powered station set-up can be seen on the 2E1EUB look up results on QRZ.com

[ANS thanks AMSAT-UK and RSGB for the above information]

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SB SAT @ AMSAT $ANS-254.05
KiwiSAT Students Win Grant

AMSAT News Service Bulletin 254.05
From AMSAT HQ SILVER SPRING, MD.
September 11, 2011
To All RADIO AMATEURS
BID: $ANS-254.05

Massey University engineering students have been awarded a grant to work on software for the Amateur Radio satellite KiwiSAT.

Scoop reports that:

Four fourth-year honours students and a Masters student from the School of Engineering and Advanced Technology at the Albany campus have been awarded a $7,500 grant from the New Zealand Association of Radio Transmitters' Radio Science Education Trust to develop the software. The micro satellite is the size of a basketball and will be launched from a Russian rocket in the northern hemisphere when the project is finished.

KiwiSAT is being designed and built by a team of volunteers from New Zealand Radio Amateurs supported by Massey and various corporate sponsors. It will connect with amateur radio stations globally and will carry out experimental work in small satellite Attitude Determination and Control (ADAC) - a low cost control system that works through interaction with the Earth's magnetic field to position the satellite at a specific attitude.

Read the full story at
http://www.scoop.co.nz/stories/ED1108/S00164/
massey-students-create-space-satellite-software.htm

KiwiSAT - Taking New Zealand into Space
http://www.kiwisat.org/

[ANS thanks Southgate ARC news site for the above information]

/EX

SB SAT @ AMSAT $ANS-254.06
OSCAR-11 Report 01 September 2011

AMSAT News Service Bulletin 254.06
From AMSAT HQ SILVER SPRING, MD.
September 11, 2011
To All RADIO AMATEURS
BID: $ANS-254.06

This report covers the period from 27 April to 01 September 2011. The satellite has continued to operate in a very predictable way since the last report, and no changes have been observed. During this time the satellite has been heard reliably during its ten-day transmission periods. Excellent signals have been reported from stations located around the world, and good copy obtained from decoded telemetry frames.

The easiest way to check whether OSCAR-11 is operational is to look at the General Satellite Status website http://oscar.dcarr.org/index.php . You can also calculate the operating schedule from the last switch-off time, which was 26 August 2011 at 08:00 UTC (approx), using 10.35 days off followed by 10.35 days on.

Reception reports have been received from David VE3SB, Jerry WB5LHD, Toby MM0TOB, Colin VK5HI and Lee M0HOK. Many thanks to all and those who posted to the status website.

Although eclipses occur during every orbit, the evening passes over the UK were mostly clear of eclipses, owing to the longer hours of daylight during the Summer months. This resulted in stronger signals during the evening passes. However, as winter approaches eclipses will now start to affect the evening passes.

The on-board clock continues to gain, 26 seconds during the current reporting period, and 83 seconds since regular transmissions started at the end of August 2010. There is however a large accumulated error of 308.54339 days slow. This was caused mainly by the clock stopping during eclipses, when there was also an unknown drain on the power supply. The units of the least significant digit correspond approximately to seconds (0.86 seconds actually).

The VHF beacon frequency is 145.826 MHz. AFSK FM ASCII Telemetry. The satellite is operating in the default mode, with a cycle time of 20.7 days. 10.35 days on followed by 10.35 days off.

At the present time, while OSCAR-11 is operating in a predictable way, I no longer need direct reports or files by e-mail. However, could all listeners continue to enter their reports on the general satellite status website. This is a very convenient and easy to use facility, which shows the current status of all the amateur satellites, and is of use to everyone. Reports around the expected times of switch-on and switch-off are of special interest, especially for times 12:00 - 17:00 and 22:00 - 07:00 UTC, when the satellite is out-of-range in the UK . The URL is http://oscar.dcarr.org/index.php

A longer version of this report report is available on my website, and new listeners to OSCAR-11 should read this for further information. The URL is www.g3cwv.co.uk/oscar11.htm This page contains a links to the longer report, a short audio clip to help you identify the satellite and a file of the last telemetry received. The website also contains an archive of news & telemetry data which is updated from time to time, and details about using a soundcard or hardware demodulators for data capture. There is also software for

capturing data, and decoding ASCII telemetry.

If you place this bulletin on a terrestrial packet network, please use the bulletin identifier $BID:U2RPT156.CWV, to prevent duplication.

73 Clive G3CWV xxxxx@amsat.org (please replace the x's by g3cwv)

[ANS thanks Clive, G2CWV, for the above information]

/EX

SB SAT @ AMSAT $ANS-254.07
5.7 Metric Ton Satellite Uncontrolled Re-Entry Expected Soon

AMSAT News Service Bulletin 254.07
From AMSAT HQ SILVER SPRING, MD.
September 11, 2011
To All RADIO AMATEURS
BID: $ANS-254.07

Leonard David reported in his September 7 Space Insider Column on Space.com, "Huge Defunct Satellite to Plunge to Earth Soon, NASA Says".

He wrote, "The huge Upper Atmosphere Research Satellite (UARS) is expected to re-enter Earth's atmosphere in an uncontrolled fall in late September or early October. Much of the spacecraft is expected to burn up during re-entry, but some pieces are expected to make it intact to the ground, NASA officials said."

He further reported that NASA computer analysis showed that about 150 component types, including the parent body of the satellite, will demise during re-entry, and 12 types (26 counting multiple components) would endure the fiery fall to Earth. The analysis indicated a surviving mass of 1,170 pounds (532 kilograms) falling within a debris footprint length of some 500 miles (800 kilometers).

The satellite is 35 feet long, 15 feet in diameter, and weighs 5.7 metric tons. It's operational orbit was at 375 miles inclined at 57 degrees to the equator.

"The risk to public safety or property is extremely small, and safety is NASA's top priority," noted a NASA website dedicated to the re-entry. There is a chance that pieces of debris from the satellite will crash in areas accessible to the public.

According to NASA, on UARS re-entry day, "if you find something you think may be a piece of UARS, do not touch it. Contact a local law enforcement official for assistance."

As of September 7 a NASA statement read, "It is too early to say exactly when UARS will re-enter and what geographic area may be

affected, but NASA is watching the satellite closely and will keep
you informed."

The full story was published on September 7 on the Space.com site:
http://www.space.com/12859-nasa-satellite-falling-space-debris-uars.html

[ANS thanks Space.com for the above information]

/EX

SB SAT @ AMSAT $ANS-254.08
Satellite Shorts From All Over

AMSAT News Service Bulletin 254.08
From AMSAT HQ SILVER SPRING, MD.
September 11, 2011
To All RADIO AMATEURS
BID: $ANS-254.08

+ Episode 16 of the internet TV show Ham Nation is available for down
load at http://twit.tv/show/ham-nation/16. This week's show features
Steve Bible, N7HPR talking about AMSAT & ARISsat-1 along with many
other interesting ham radio topics.

+ Trevor, M5AKA forwarded a link from the BBC with news that the
United Kingdom's first satellite launched on a UK built rocket
40 years ago will attempt to be reactivated. The Prospero space
craft was launched by a Black Arrow rocket on October 28, 1971
from Launch Area 5B, Woomera. It operated on 137.560 MHz.
Full story and pictures at
http://www.bbc.co.uk/news/science-environment-14783135
Additional information on the AMSAT-UK website:
http://tinyurl.com/3dny3s4
Web based tracking for Prospero: http://www.n2yo.com/?s=5580
and at: http://www.vk3ukf.com/Space/GadgetSatProspero.htm

+ Congratulations to Rodney, KC0ZHF for earning his VUCC endorsement
for grids 100-250.

+ The AO-27 website is temporarily down. The Java scheduler app will
always be accurate to within 2 minutes (the cumulative error in the
satellite's clock) as long as a new schedule hasn't been uploaded
to the bird itself. While the latest files for the AO-27 schedule
are on the webpage, the required data files for the Java app until
the website is back up, have been placed on the Java scheduler down-
load page http://sites.google.com/site/ao27satellitescheduler
(George, KA3HSW)

+ An article regarding getting the FUNcube Dongle to run under linux
can be found at: http://webshed.org/wiki/FUNcube-Dongle-Linux

+ NASA is giving the public the power to journey through the solar
system using a new interactive Web-based tool. The "Eyes on the
Solar System" interface combines video game technology and NASA

data to create an environment for users to ride along with agency spacecraft and explore the cosmos. Screen graphics and information such as planet locations and spacecraft maneuvers use actual space mission data. Begin your ride at: http://solarsystem.nasa.gov/eyes/

+ The Summer 2011 TAPR Packet Status Register newsletter is now available at http://www.tapr.org/psr

+ A.R.I. DX Bulletin No 1061 posted that Eric, KV1J and Jack, KV1E will be active as FP/KV1J and FP/KV1E from Miquelon Island (NA-032) from 25 October to 1 November. Plans are to operate SSB and RTTY, with some CW and PSK31, on 160-10 metres, plus 6m "if indications of openings". FP/KV1J will take part in the CQ WW DX SSB Contest (SOAB HP). QSL via home calls, direct or bureau, and LoTW, Information on satellite activity and and other details can be found at: http://www.kv1j.com/fp/october11.html AO-51 (if available), AO-27, SO-50, SO-67, and HO-68. All FM mode, V/U

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-254.09
ARISS Status - 5 September 2011

AMSAT News Service Bulletin 254.09
From AMSAT HQ SILVER SPRING, MD.
September 11, 2011
To All RADIO AMATEURS
BID: $ANS-254.09

1. Vision Australia Contact Successful

Students from Vision Australia in Enfield, New South Wales, Australia took part in an Amateur Radio on the International Space Station (ARISS) contact on Monday, August 29 via station WH6PN in Hawaii. On-orbit Astronaut Mike Fossum, KF5AQG answered 12 questions put to him by the youth before the ISS went over the horizon. Students were interested in the logistics of living in space as well as how astronauts stay in contact with friends and family during their missions. Vision Australia is a nonprofit agency that provides low vision and blindness services to the community in Australia.

2. Merritt Island Students Speak with Satoshi Furukawa

On Tuesday, August 30, an Amateur Radio on the International Space Station (ARISS) contact was held between da Vinci Academy of Aerospace Technology students at Merritt Island High School in Florida and Astronaut Satoshi Furukawa, KE5DAW on the ISS. Questions asked included those concerning the long term effects of microgravity on the human body and influences on Furukawa's decision to study in the fields of STEM (Science, Technology, Engineering and Math). Florida Today ran a story on the event:

http://www.floridatoday.com/apps/pbcs.dll/article?AID=2011108310317

3. EE Times, ARISSat Blog

Another entry has been posted to the EE (Electronic Engineering) Times
"Chips in Space" blog about amateur radio satellite ARISSat-1. This
week the blog covers the "Design challenges, intrigue and solutions"
of the project. See:
http://www.eetimes.com/electronics-blogs/other/4219588/Chips-in-Space--Desig
n-challenges--intrigue-and-solutions

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the
President's
Club. Members of the President's Club, as sustaining donors to AMSAT Project
Funds, will be eligible to receive additional benefits. Application forms
are
available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

124. KAJAL AGARWAL LATEST HOT WITHOUT TOP

Newsgroup: rec.radio.amateur.space
Date: 2011-09-13 10:32:05 UTC
From: devi <satyamsivam9030@gmail.com>
Message-ID: <6d57b47d-0458-4373-8ce3-35653bee018b@m4g2000pri.googlegroups.com>
Source record: 350

LATEST HOT TAPSEE KISSING STILLS
http://southactresstou.blogspot.com/2011/06/tapsee.html
KAJAL AGARWAL ROMANTIC STILLS
http://southactresstou.blogspot.com/2011/05/kajal-agarwal.html
TAMANNA BEAUTIFUL PHOTOS
http://southactresstou.blogspot.com/2011/05/tamanna.html
ANUSHKA SHETTY HOT SAREE STILLS
http://southactresstou.blogspot.com/2011/06/anushka-shetty.html
SNEHA RARE PHOTOS
http://southactresstou.blogspot.com/2011/05/sneha.html
NAMITHA HOT NAVEL SHOW
http://southactresstou.blogspot.com/2011/05/namitha.html
ILIYANA HOT WALLPAPERS
http://southactresstou.blogspot.com/2011/05/iliyana.html
PRIYAMANI LATEST SPICY PHOTOS
http://southactresstou.blogspot.com/2011/05/priyamani.html

FOR ONLY HOT GUYS SEE THIS
TOP 20 HOT ACTRESS PHOTOS
http://hotactress-kalyani.blogspot.com/2011/08/hot-actrsess.html
KAJAL AGARWAL LATEST HOT
http://hotactress-kalyani.blogspot.com/2011/08/kajal-agarwal-hot-photos.html
LATEST AMISHA PATEL HOT PICS
http://hotactress-kalyani.blogspot.com/2011/08/amisha-patel-hot.html
TAPSEE DIFFERENT STILLS
http://hotactress-kalyani.blogspot.com/2011/08/tapsee-hot.html
PRIYAMANI HOT PHOTOS
http://hotactress-kalyani.blogspot.com/2011/08/priyamani-hot.html
ARTHI CHABRIA HOT PHOTOS
http://hotactress-kalyani.blogspot.com/2011/08/aarti-chabria-hot.html
DIYA MIRZA HOT PHOTOS
http://hotactress-kalyani.blogspot.com/2011/08/diya-mirza-hot.html
KATRINA KAIF HOT PHOTOS
http://hotactress-kalyani.blogspot.com/2011/08/katrina-kaif-hot.html
DEEPIKA PADUKONE HOT PHOTOS
http://hotactress-kalyani.blogspot.com/2011/08/deepika-padukone-hot.html
NAMITHA HOT PHOTOS
http://hotactress-kalyani.blogspot.com/2011/08/namitha-hot-photos.html

125. Weekly Highlights of Solar and Geomagnetic Activity, 05 - 11 September 2011

Newsgroup: rec.radio.amateur.space
Date: 2011-09-13 21:30:24 UTC
From: SWPC.Webmaster@noaa.gov
Message-ID: <20110913213002.2EDB533C51@panix2.panix.com>
Source record: 251
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.info

```
:Product: Weekly Highlights and Forecasts
:Issued: 2011 Sep 13 1952 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
# Weekly Highlights and Forecasts
#
Highlights of Solar and Geomagnetic Activity
05 - 11 September 2011

During the period, solar activity ranged from low to high levels due
to a total of 7 M-class and 2 X-class events. The sharp increase in
activity from the previous period originated from two regions;
Region 1286 (N20, L=304, class/area Dso/080 on 03 September) and
Region 1283 (N14, L=226, class/area Dai/230 on 07 September).

The period began at moderate levels due to two M1 x-ray events
observed originating from Region 1286 at 05/0428 UTC and 05/0758 UTC
respectively.

Solar activity increased to high levels on 06 September. Region 1283
produced an M5/1b flare at 06/0150 UTC and an X2/2b at 06/2220 UTC.
The M5 flare had associated Types II and IV radio sweeps and an
Earth-directed full-halo CME. The CME had an estimated speed of
approximately 450 km/s, based upon STEREO-A COR2 data, with the bulk
of the ejecta directed north of the ecliptic plane. The X2 flare was
associated with Types II and IV radio sweeps, a 740 sfu Tenflare and
an Earth-directed halo CME. The CME had an estimated speed of around
800 km/s, based on STEREO-A COR2 images, with the bulk of mass
directed north of the ecliptic plane. 07 September saw high levels
again as Region 1283 produced more major activity. Another major
event was observed near the end of the 7th when Region 1283 produced
an X1/3b at 07/2238 UTC with associated weak Types II and IV radio
sweeps, a 1300 sfu Tenflare, and a non-Earth-directed CME. High
activity levels persisted on 08 September when Region 1283 produced
an M6/1n at 08/1546 UTC associated with a weak Type IV radio sweep.

Solar activity decayed to moderate levels on 09 September when
Region 1283 produced two M-class flares. The first was an M2/1n at
09/0609 UTC with an associated Type II radio sweep (estimated
velocity 717 km/sec) and a non-geoeffective CME. The second was an
M1/1f at 09/1249 UTC. On 10 September, a significant filament
eruption centered near N10W48 occurred around 10/0300 UTC.
```

Associated with this eruption was a partial-halo CME (plane-of-sky speed of 620 km/s). As it neared the west limb, Region 1283 produced an M1/Sn at 10/0740 UTC with an associated limb-event CME. On 11 September, solar activity further decreased to low levels. A long duration C6/Sf flare was observed at 11/0851 UTC from Region 1283 as it rotated around the west limb.

There were no proton events observed at geosynchronous orbit. However, two separate enhancements, both in the 10 MeV and 100 MeV energy levels, were observed in the wake of the M5 event early on 06 September and the X2 event late on the 6th. The first enhancement saw a peak of 2.4 pfu at 06/1410 UTC at 10 MeVs and 0.15 pfu at 06/0850 UTC at 100 MeVs. The second enhancement saw a peak of 8.8 pfu at 07/0715 UTC at 10 MeVs and 0.4 pfu at 07/0410 UTC at 100 MeVs. Protons at all energy levels declined to background levels by 08/1800 UTC.

The greater than 2 MeV electron flux at geosynchronous orbit was at moderate levels on 05 - 06 September, reached high levels on 07 - 09 September and declined to normal levels on the 10th. Moderate levels were observed again on 11 September.

The geomagnetic field ranged from quiet to severe storm levels. The period began with mostly quiet conditions from 05 September through midday on 09 September. Brief periods of active to minor storm conditions were observed at high latitudes on 06 September due to extended periods of southward Bz. Midday on 09 September, two sudden impulses (SI) were observed at 09/1243 UTC and 09/1250 UTC (16nT and 28nT respectively, as measured by the Boulder USGS magnetometer). At 09/1150 UTC, ACE data indicated an interplanetary shock arrival preceding the Boulder SIs. Bt reached up to 24nT, Bz dropped to -23nT, density spiked up to 35p/cc, wind speeds peaked at 602km/s, and temperature increased. As a result, geomagnetic activity levels increased to active to isolated high latitude severe storm levels. Activity was due to combined CME effects associated with 06 - 07 September major flare activity. The storm conditions persisted through 10 September. Late on 10 September, solar wind speed increased to around 620 km/s while the total IMF field (Bt) dropped to around 4nT indicating a likely transition into a negative polarity coronal hole high speed stream (CH HSS). Mostly quiet to unsettled levels were seen on 11 September with an isolated minor storm period at high latitudes.

Forecast of Solar and Geomagnetic Activity
14 September - 10 October 2011

Solar activity is expected to be at low to moderate levels through 10 October. A slight chance for an X-class event is possible on 18 September through 07 October as old Regions 1286 (N20, L=304) and 1283 (N14, L=226) rotate back on to the visible disk. Chances for major activity will further increase on 24 September through 01 October when both regions are on the visible disk. Activity is

expected to decrease to low to moderate levels from 08 October through the remainder of the period.

No proton events are expected at geosynchronous orbit through 17 September and again from 08 - 10 October. There is a slight chance for a proton enhancement from 18 September through 07 October due to potential flare activity from Regions 1283 and 1286.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at high levels from 14 - 17 September and normal to moderate levels 18 - 25 September. High levels are expected on 26 - 27 September due to effects from a geoeffective CH HSS. Normal to moderate levels are expected from 28 September - 01 October. High levels are expected again on 02 - 03 October due to another CH HSS. Normal to moderate levels are expected from 04 - 09 October followed by another period of high levels on 10 October due to a third CH HSS.

The geomagnetic field is expected to be mostly quiet through the period. Unsettled conditions are possible on 18 - 19 and 24 - 25 September due to recurrent CH HSS rotating into a geoeffective position. Unsettled conditions with isolated active periods possible are expected on 30 September as a positive polarity CH HSS becomes geoeffective. Unsettled conditions will continue into 01 October. Mostly quiet condtions are expected from 02 through 07 October until another recurrent CH HSS becomes geoeffective. Mostly unsettled conditions are then expected from 08 - 10 October with isolated active periods possible on 09 October.

126. WSR-257 AMSAT Weekly Satellite Report

Newsgroup: rec.radio.amateur.space
Date: 2011-09-14 16:23:17 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <002401cc72fa92283200b6789600$@net>
Source record: 252
Cross-posted to: rec.radio.amateur.space,rec.radio.info

```
This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-257.S1
WSR 257 Part 1 09/14/2011

AMSAT NEWS SERVICE BULLETIN 257.S1
FROM AMSAT HQ SILVER SPRING, MD, September 14, 2011
TO ALL RADIO AMATEURS
BID: $WSR-257.S1

ARISSat-1 (Radioskaf-b) (Kedr)
Catalog number: 37772
Launch date: August 03, 2011 1843z
Launch site: International Space Station

Status: Operational

Callsign: RS01S

Current Mode(s):
Linear Transponder: U/v
Uplink: 435.758 to 435.742 MHz CW/LSB
Downlink: 145.922 to 145.938 MHz CW/USB

FM Telemetry/SSTV/Messages/ID:
Downlink: 145.950 MHz FM

Telemetry/Beacon:
Downlink: 145.939 MHz CW1
145.919 MHz CW2
145.920 MHz 1k BPSK USB
145.920 MHz 400b BPSK USB

Official Webpage:http://www.amsat.org/amsat-new/ARISSat/ARISSat.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/informal_detail.php?serialnum=89
[08112011]
=====
SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009 1555z
```

Launch site: Baikonur, Kazakhstan

Status: By schedule

Callsign: ZS0SUM

Uplink: 145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=88
[02092011]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=68
[02092011]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05, 2005 0444z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.9360 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=30

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[02092011]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004 0745z
Launch site: Baikonur, Kazakhstan

Status: Semi-operational - IHU crash each eclipse

Current Mode(s):
Voice repeater: V/u
Uplink: 145.880 MHz FM
Downlink: 435.150 MHz FM

Telemetry: Recovery efforts
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.880 MHz FM
145.920 MHz FM
145.920 MHz FM - 67 Hz PL tone burst
1268.705 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.703 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=19
[06162011]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002 1700z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4
Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the re-
peater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
the 10 minute timer.
[02092011]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
145.870 MHz FM
145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK

Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[06232011]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993 0140z
Launch site: Kourou, French Guiana

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[02092011]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974
Launch site: Vandenberg AFB, California, USA

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
145.975 to 145.925 MHz CW/USB Mode B (8W PEP)

145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
145.972 MHz CW
435.100 MHz CW
2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02092011]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
Kourou, French Guiana
Uchinoura Space Center, Japan
Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - OFF
APRS - OFF
SSTV - OFF

Expedition 28 Crew (May - September 2011):
Commander: Andrey Borisenko
Flight Engineer: Ron Garan KF5GPO
Flight Engineer: Alexander Samokutyaev
Flight Engineer: Satoshi Furukawa
Flight Engineer: Sergey Volkov KE5DAW
Flight Engineer: Micheal Fossum KF5AQG

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[07282011]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-257.S2
WSR 257 Part 2 09/14/2011

AMSAT NEWS SERVICE BULLETIN 257.S2
FROM AMSAT HQ SILVER SPRING, MD, September 14, 2011
TO ALL RADIO AMATEURS
BID: $WSR-257.S2

O/OREOS
Catalog Number: 37224
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.035 MHZ AX.25

Beacon:

Callsign:

URL: http://www.ooreos.org/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=146
[02092011]
=====

Rax-1 Radio Aurora Explorer
Catalog Number: 37223
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.505 MHz 9k6 GMSK

Beacon:

Callsign: RAX-1

URL: http://rax.engin.umich.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=165
[02092011]
=====
FO-69 Fastrac-1 Sara Lily
Catalog Number: 37227
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Operational

Uplink 1: 145.980 MHz 1k2 baud
Uplink 2: 145.825 MHz 1k2 baud
Downlink: 437.345 MHz 1k2 and 8k6 baud

Beacon: 437.435 MHz 1k2 AX.25

Callsign: Fast1

URL: http://fastrac.ae.utexas.edu/index.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=83
[07052011]
=====
FO-70 Fastrac-2 Emma
Catalog Number: 37380
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Operational

Uplink 1: 435.025 MHz 1k2 baud
Uplink 2: 437.435 MHz 9k6 baud
Downlink: 145.825 MHz

Beacon: 145.825 MHz 1k2 AX.25

Callsign: Fast2

URL: http://fastrac.ae.utexas.edu/index.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=84
[07052011]
=====
StudSat
Catalog Number: 36796
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink: 437.505MHz, 9600bps FSK
Downlink: 437.505MHz, 9600bps FSK
Beacon : 437.505MHz, 20bps ASK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=164
[02092011]
=====
TIsat-1
Catalog Number: 36799
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On orbit

Callsign: HB9DE

Uplink: 145.980MHz FM, AFSK
Downlink: 437.305MHz FM, AFSK
Beacon: 437.305MHz CW

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=118
[02092011]
=====
HO-68 HOPE-1 (CAS-1)(XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009 0231z
Launch site: Taiyuan Space Center, PRC

Status: Beacon only

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
145.9250 - 145.9750 MHz SSB/CW
145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
435.7650 - 435.7150 MHz SSB/CW
435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=108

For more information about XW-1 (CAS-1):
http://
[08112011]
=====
SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w): 437.5050MHz FSK 1k2bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=109
[02092011]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
437.3850 MHz FSK 9k6bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=110
[02092011]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=113

[02092011]
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
Beacon(500mw): 436.000MHz GMSK 9k6bp
[02092011]
=====
CP-6
Catalog Number: 35003
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: Operational

Downlink: 437.365 MHz 1k2 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=121
[02092011]
=====
HAWKSAT 1
Catalog number: 35004
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: operational

Downlink: 437.345 MHz ?

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=105
[02092011]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: Operational

Downlink: 437.465 MHz 1k2 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=94
[02092011]

=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009 0115z
Launch Site: Satish Dhawan Space Centre, India

Status: ?

Downlink: 435.000 MHz
Uplink: 145.800 MHz

Telemetry: 137.400 MHz
[02092011]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon: 437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=101
[02092011]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: In Orbit

Downlink: 437.375 MHZ FSK9k6/CW
Beacon: 437.375 MHz FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[02092011]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
437.465 MHz FM/CW
Beacons: 437.305 MHz FM/CW
437.275 MHz FM/CW

Callsigns: JR5YBN
JR5YBO

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[02092011]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Downlink: 437.455 MHz AFSK/CW
Beacon: 437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[20092011]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon: 437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[02092011]

=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008 1520z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Curent Modes: Telemetry
Audio
Images

Downlinks: 435.315 MHz
435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02092011]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web
page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=46
[02092011]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=60

[02092011]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational ?

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL
=/satellites/status.php
[07052011]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Current Mode: dependant on last received command

Uplink: 145.980 MHz FM
Downlink: 437.275 Mhz CW
437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[06162011]
=====
CO-66 Seeds II

Catalog number:
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web
page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL
=/satellites/status.php
[02092011]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=72
[02092011]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=74
[02092011]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005 0652z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=37
[02092011]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: ?????

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[02092011]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004 0745z
Launch site: Baikonur, Kazakhstan

Status: Semi-operational - IHU crash each eclipse

Current Mode(s):
Voice repeater: V/u
Uplink: 145.880 MHz FM
Downlink: 435.150 MHz FM

Telemetry: Recovery efforts
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.880 MHz FM
145.920 MHz FM
145.920 MHz FM - 67 Hz PL tone burst
1268.700 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.708 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=19
[06162011]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[02252011]
=====
CO-55 Cute-1.7+APD II
Catalog Number: 27844
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Current Mode: CW downlink worldwide
AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=78
[02092011]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001 0240z
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[02092011]
=====
RS-22 RADIO SPORT 22 (MOZHAYETS 4)
Catalog number: 27939
Launch Date: September 27, 2003 0612z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02092011]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990
Launch site: Kourou, French Guiana

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
145.860 MHz 1200-baud Manchester FSK
145.880 MHz 1200-baud Manchester FSK
145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[02092011]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984
Launch site: Vandenburg AFB, California, USA

Status: Operational ?

Current Mode: /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz
Mode-S Beacon: 2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[07052011]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)

Launch sites: Baikonur, Kazakhstan
Kourou, French Guiana
Uchinoura Space Center, Japan
Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - OFF
APRS - OFF
SSTV - OFF

Expedition 28 Crew (May - September 2011):
Commander: Andrey Borisenko
Flight Engineer: Ron Garan KF5GPO
Flight Engineer: Alexander Samokutyaev
Flight Engineer: Satoshi Furukawa
Flight Engineer: Sergey Volkov KE5DAW
Flight Engineer: Micheal Fossum KF5AQG

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[07282011]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-257.S3
WSR 257 Part 3 09/14/2011

AMSAT NEWS SERVICE BULLETIN 257.S3
FROM AMSAT HQ SILVER SPRING, MD, September 14, 2011
TO ALL RADIO AMATEURS
BID: $WSR-257.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NANOSAIL-D
Catalog Number:
Ejection Date: January 17, 2011

Status: On orbit

Downlink: 437.270 MHz AX.25

URL: http://nanosaild.engr.scu.edu/dashboard.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=115
[01272011]
=====
CP4
Catalog Number: 31132
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=79
[09062010]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=76
[09062010]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=51
[09062010]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.250

Official Website: http://www.ncube.no

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=24
[09062010]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink 2401.835 MHz 38k4 packet

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=54
[09062010]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=53
[09062010]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks: 145.850 MHz
145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====

SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks

V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON General Beacon(GB) Middle Beacon(MB) Engineering Beacon(EB)
2 m none 145.898 MHz none
70cm 435.438 MHz 435.588 MHz 435.838 MHz
13cm(1) 2400.188 MHz 2400.338 MHz 2400.588 MHz
13cm(2) 2401.173 MHz 2401.323 MHz 2401.573 MHz
3cm 10450.975 MHz 10451.125 MHz 10451.375 MHz
1.5cm 24047.885 MHz 24048.035 MHz 24048.285 MHz
[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
145.890 FM
145.930 FM
1269.700 FM
1269.800 FM
1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[07172010]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink: 435.1380 MHz AFSK 1200 BPS
Downlink: 435.2060 MHz AFSK 1200 BPS
Uplink: 145.8150 MHz AFSK 1200 BPS
Uplink: 145.8350 MHz AFSK 1200 BPS
Uplink: 145.8550 MHz AFSK 1200 BPS
Uplink: 145.8750 MHz AFSK 1200 BPS
[06042009]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks: 145.875 MHz FM 1200-baud
145.900 MHz FM 1200-baud
145.925 MHz FM 1200-baud
145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink: 435.0625 MHz FM 1k2bps AFSK
435.1125 MHz FM 1k2bps AFSK
435.1375 MHz FM 1k2bps AFSK
Downlink: 145.9750 MHz FM 1k2bps AFSK
2446.5025 MHz FM 1k2bps AFSK

Beacon: 2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink: 435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons: 435.795 MHz CW
435.910 MHz AX25

Voice Transponder:
Uplink: 145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks: 145.850 MHz
145.870 MHz
145.890 MHz
145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode: V/u

Uplink: 145.900 MHz FM 1200-baud Manchester FSK (reserved)
145.920 MHz FM VOICE
145.940 MHz FM 1200-baud Manchester FSK (reserved)
145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink: 437.026 MHz USB VOICE
(1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink: 145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink: 145.8500 MHz MFSK 1200 BPS
Uplink: 145.8700 MHz MFSK 1200 BPS
Uplink: 145.8900 MHz MFSK 1200 BPS
Uplink: 145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.8500 - 145.9000 MHz SSB/CW
Downlink 29.4000 - 29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink: 29.4500 - 29.5500 MHz SSB/CW

Beacons: 29.450 MHz
435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink: 145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB

Beacon 1: 29.352 MHz (intermittent)
Beacon 2: 29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12

Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
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SB SAT @ AMSAT W8ISS $WSR-257.S4
WSR 257 Part 4 09/14/2011

AMSAT NEWS SERVICE BULLETIN 257.S4
FROM AMSAT HQ SILVER SPRING, MD, September 14, 2011
TO ALL RADIO AMATEURS
BID: $WSR-257.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Re-entered
Re-entered: October 25, 2009

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=56
[09062010]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 437.325 MHz 9k6 GMSK
437.325 MHz CW 20wpm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=117
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 436.250 MHz 9k6 FHSS
[11112009]
=====
Pollux
Catalog Number: 35693
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=139
[09062010]
=====
Castor (ANDE-2)
Catalog Number: 35694
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=144
[09062010]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=59
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Re-Entered
Re-entered date: August 8, 2010

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[08082010]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
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ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at} amsat.org
NNNN
/EX

127. ANS-261 AMSAT News Service Weekly Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2011-09-18 13:35:12 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <000901cc7607$bff38d00$3fdaa700$@net>
Source record: 253
Cross-posted to: rec.radio.amateur.space,rec.radio.info

AMSAT NEWS SERVICE
ANS-261

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* BOD Election Results
* 2011 AMSAT Space Symposium Papers Deadline Approaches
* Get Ready for Scouting's JOTA on October 15-16
* Amateur Satellite Presentations Scheduled for Alaska and California
* Registration Open for 2011 AMSAT Space Symposium 4-6 November 2011
* NASA STEM Education Via Massively Multiplayer Online Game
* Satellite Shorts From All Over
* ARISS Status - 12 September 2011

SB SAT @ AMSAT $ANS-261.01
BOD Election Results

AMSAT News Service Bulletin 261.01
From AMSAT HQ SILVER SPRING, MD.
September 18, 2011
To All RADIO AMATEURS
BID: $ANS-261.01

The 2011 AMSAT-NA Board of Directors election has been completed with the following results:

Barry Baines, WD4ASW- 576
Tony Monteiro, AA2TX - 560
Alan Biddle, WA4SCA - 516
Drew Glasbrenner, KO4MA - 418
Mark Hammond, N8MH - 319 First Alternate
Patrick Stoddard, WD9EWK - 275 Second Alternate
Steve Coy, K8UD - 229

***** A total of 751 ballots were received *****

In accordance with the Bylaws of AMSAT-NA those receiving the four highest number of votes are elected as regular members of the Board of Directors for the next 2 years. The alternates will serve for one year until the next election.

[ANS thanks AMSAT HQ Office the above information]

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SB SAT @ AMSAT $ANS-261.02
2011 AMSAT Space Symposium Papers Deadline Approaches

AMSAT News Service Bulletin 261.02
From AMSAT HQ SILVER SPRING, MD.
September 18, 2011
To All RADIO AMATEURS
BID: $ANS-261.02

Your papers for the 2011 AMSAT Space Symposium are due by October 1 for inclusion in the printed proceedings. Yes, that's just a couple of weeks from now!

Papers, symposium presentations and poster presentations are invited on any topic of interest to the amateur satellite community.

The Symposium will be held on Friday, November 4th through Sunday, November 6th in San Jose, CA.

Papers should be sent to Dan Schultz, N8FGV, at: n8fgv@amsat.org.

[ANS thanks Dan Schultz, N8FGV for the above information]

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SB SAT @ AMSAT $ANS-261.03
Get Ready for Scouting's JOTA on October 15-16

AMSAT News Service Bulletin 261.03
From AMSAT HQ SILVER SPRING, MD.
September 18, 2011
To All RADIO AMATEURS
BID: $ANS-261.03

Get Ready for Scouting's JOTA on October 15-16

Scouting's Jamboree on the Air event is coming up on October 15-16. During this annual event Scouts and Guides all over the world speak to each other over amateur radio contacts. Scouting experiences are exchanged and ideas are shared, via the radio waves.

The event starts at 00.00 hours local time on the Saturday and concludes 48 hours later at 24.00 hours local time on the Sunday. Each station can choose its own operating hours within this period.

Each year during JOTA about half-a-million Scouts and Guides "get together" over the airwaves. Modern communication technology offers Scouts the exciting opportunity to make friends in other countries.

Most Scouts take advantage of the local volunteer efforts of amateur radio operators in their area. This is where you can volunteer your station for scouting participation. You may also help by answering calls on the air from scouts.

AMSAT encourages our members to take advantage of JOTA to provide amateur satellite demonstrations.

The World Scouting Organization in Switzerland posted JOTA information on their web: http://tinyurl.com/3rfp2cn (www.scout.org)

Also, visit the World Scouting Radio Library at: http://tinyurl.com/5sz7tf5 (www.scout.org)

The Boy Scouts of America has several resources on-line for amateur radio stations participating in JOTA: http://tinyurl.com/6d93qb7 (Boy Scouts of America www.scouting.org)

[ANS thanks the Scouting Movement for the above information]

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SB SAT @ AMSAT $ANS-261.04
Amateur Satellite Presentations Scheduled for Alaska and California

AMSAT News Service Bulletin 261.04
From AMSAT HQ SILVER SPRING, MD.
September 18, 2011
To All RADIO AMATEURS
BID: $ANS-261.04

This weekend AMSAT area coordinator Clint Bradford, K6LCS, is presenting his 'Working Amateur Satellites With Your HT' session at the Anchorage Amateur Radio Club annual hamfest.

After this look for Clint back on warmer turf in California where he is scheduled for TWO 'Working Amateur Satellites With Your HT' sessions at PACIFICON 2011 in Santa Clara on Saturday, October 15.

Clint wrote, "We had a great time last year - with a full conference room and several passes that we worked. I'll be making my presentation from 11AM-noon and 1-2PM. We have tentative passes of AO-27, AO-51, and ARISSat-1 (hopefully!) - Watch for posters near the check-in area for exact times."

Download Clint's tutorial and programming charts from: http://www.work-sat.com . Clint always encourages pre-presentation inquiries. Send email to Clint at clintbradford.com- or call him at 909-241-7666. See you in Santa Clara! PACIFICON's Web site is http://www.pacificon.org .

[ANS thanks Clint Bradford, K6LCS for the above information]

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SB SAT @ AMSAT $ANS-261.05
Registration Open for 2011 AMSAT Space Symposium 4-6 November 2011

AMSAT News Service Bulletin 261.05
From AMSAT HQ SILVER SPRING, MD.
September 18, 2011
To All RADIO AMATEURS
BID: $ANS-261.05

AMSAT announces the 2011 AMSAT Space Symposium will be held on Friday, November 4th through Sunday, November 6th in San Jose, CA. Our annual gathering will feature:

+ Space Symposium with Amateur Satellite Presentations
+ Operating Techniques, News, & Plans from the Amateur Satellite World
+ Board of Directors Meeting open to AMSAT members (Nov. 3-4)
+ Meet Board Members and Officers
+ Annual General Membership Meeting
+ Annual Banquet-Keynote Speaker and Door Prizes

The 2011 Symposium hotel and registration web pages are now available on the AMSAT web site. You may register for the Symposium and Annual Banquet at the AMSAT Store:
http://www.amsat-na.com/store/SymposiumReg.php

Visit the Symposium and Annual General Meeting web page for details and the latest information:
http://www.amsat.org/amsat-new/symposium/2011/index.php

Symposium Registration including a copy of the Proceedings is:
+ $45 per person until September 19, 2011
+ $50 per person starting September 20, 2011
+ $55 per person at the door

The Saturday evening banquet is $45 per person. The Sunday morning Area Coordinator's Breakfast is $15 per person.

The hotel selected is the Wyndham San Jose, close to the airport. The AMSAT discount rate is $79.00+taxes per night. The reservation block code when calling the hotel directly is "AMSAT". The hotel telephone number is 408-453-6200. If you are making reservations on-line use 1031FSJAM for the group code. The direct link to the hotel web page is: http://www.wyndham.com/hotels/SJCAP/main.wnt

If you are planning to book a room on dates other than November 2, 3, 4, 5, you will have to call the hotel directly and ask for *in-house reservations*. You can get the $79 rate 3 days before and 3 days after the above dates but you cannot book the room on their website. Any problems, give Martha a call at the AMSAT Office: 301-589-6062.

[ANS thanks the 2011 Symposium Committee for the above information]

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SB SAT @ AMSAT $ANS-261.06
NASA STEM Education Via Massively Multiplayer Online Game

AMSAT News Service Bulletin 261.06
From AMSAT HQ SILVER SPRING, MD.
September 18, 2011
To All RADIO AMATEURS
BID: $ANS-261.06

The NASA Learning Technologies (LT) project supports the development of projects that deliver NASA content through innovative applications of technologies to enhance education in the areas of science, technology, engineering and mathematics (STEM). Research and development are at the core of the LT mission. LT seeks to enhance formal and informal education in STEM fields with the goal of increasing the number of students in those fields of study and is currently investigating the development of a NASA-based massively multiplayer online educational game (MMO).

Quoting the Learning Technologies Project, "There is increasing recognition that these synthetic environments can serve as powerful "hands-on" tools for teaching a range of complex subjects. Virtual worlds with scientifically accurate simulations could permit learners to tinker with chemical reactions in living cells, practice operating and repairing expensive equipment, and experience microgravity, making it easier to grasp complex concepts and transfer this understanding quickly to practical problems. MMOs help players develop and exercise a skill set closely matching the thinking, planning, learning, and technical skills increasingly in demand by employers. These skills include strategic thinking, interpretative analysis, problem solving, plan formulation

and execution, team-building and cooperation, and adaptation to rapid change."

The first learning game environment, Moonbase Alpha, a game scenario with both single-player and multiplayer options is set on a hypothetical lunar outpost in a 3-D immersive setting. Players step into the role of an exploration crewmember and deal with realistic mission challenges and choices. Timelines in the much anticipated Astronaut:

Moon, Mars and Beyond MMO will be set even farther in the exciting future (2035+), but you can already explore our own near-future moon missions thanks to the NASA Learning Technologies and Innovative Partnerships Programs.

NASA's Learning Technologies web site can be accessed at:
http://ipp.gsfc.nasa.gov/mmo/
You will find the link to the already released Moonbase Alpha game at this site, along with information about the development of the new Astronaut: Moon, Mars and Beyond massively multiplayer online educational game.

[ANS thanks Space.com for the above information]

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SB SAT @ AMSAT $ANS-261.07
Satellite Shorts From All Over

AMSAT News Service Bulletin 261.07
From AMSAT HQ SILVER SPRING, MD.
September 18, 2011
To All RADIO AMATEURS
BID: $ANS-261.07

+ Although the astronauts now use digital cameras the Hasselblad camera was the film camera standard for much of the space program's history. An astronaut's photography manual provided by Hasselblad for NASA astronauts can be downloaded at: http://tinyurl.com/4dupx8s (www.hasselblad.com). This is a 40 page color PDF file really solid photography guide, with great information on lenses, exposure settings, and camera technique. Any photographer could get some use out of it. But if you happen to be up in space, you'll have everything you need to get that perfect shot. (UniverseToday.com)

+ Congratulations to Tom Schuessler N5HYP for a successful Radio Merit Badge class and amateur radio satellite demo at the National Scouting Museum. The Boy Scout station K2BSA/5 had contacts with K8YSE, KX9X, WA4HFN, NE5BO, ND9M, K4FEG, KT3L, N9AMW, AA0SV, K5OE, N8MS, N2VYT and VE2RCN via AO-51. K2BSA/5 will again be active on October 15th for JOTA.

+ NASA Grail mission to the moon should downlink on 2280.6 MHz and 2279.511 MHz. X-Band Doppler ranging beacons are on 8451.5995 MHz and 8451.7995 MHz.

+ George Carr, WA5KBH has received the logs and cards from Hector, CO6CBF and is ready to perform his QSL manager duties. Please send your cards to his callbook address and include a SASE. Contacts from CO6CBF home grid of EL92 and his recent trip to EL91/FL01 are being processed. Hector has his 100th QSL in LoTW and is expectedto become the first atellite VUCC from Cuba. (WA5KBH)

+ Congratulations to AMSAT member, Zack Beougher, KD8KSN (EN80) for being honored as ARRL Great Lakes' Division, Young Radio Amateur of the Year. This is great honor for Zack, and it speaks well for the future of AMSAT, having such a fine young man in our midst! (E. Michael McCardel, KC8YLD Ohio Section Affiliated Club Coordinator, ARRL)

+ Jens, DL7VTX, is apparently operating portable in EA8. He was worked on AO-51 this week. No info on how long he might be there, but if you are on the East Coast and need EA8, listen for him. (John, K8YSE)

+ Bob, W7LRD, reported good DX via AO-7 on September 14 from Seattle, Washington (grid CN87wk). Bob worked OH5LK in KP30on for a distance of 7692km.

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-261.08
ARISS Status - 12 September 2011

AMSAT News Service Bulletin 261.08
From AMSAT HQ SILVER SPRING, MD.
September 18, 2011
To All RADIO AMATEURS
BID: $ANS-261.08

Amateur Radio on the International Space Station (ARISS) Status Report September 12, 2011

1. Kobe Science Museum Contact Successful

An Amateur Radio on the International Space Station (ARISS) contact was held between youth visiting the Kobe Science Museum in Kobe-city, Japan and ISS Astronaut Satoshi Furukawa, KE5DAW on Monday, September 5. Children were interested in how astronauts prepare for their missions and how life in space differs from that on Earth. Approximately 90 people were present for the event and media coverage included at least two newspapers and one television station. The contact highlighted lessons covering the ISS, space and regional and global environments.

2. Pine Tree Middle School Students Radio Mike Fossum

On Friday, September 9, Pine Tree Middle School in Longview, Texas participated in an Amateur Radio on the International Space Station (ARISS) contact. Mike Fossum, KF5AQG answered over 20 questions posed to him by the students about what it is like to live in space and the experiments currently being conducted on the ISS. The contact was incorporated into a science curriculum which covered space, ecosystems and the contributions of scientists to society.

3. U.S. Schools Selected for ARISS Contacts

The ARISS-U.S. proposal selection committee met at the end of August and chose ARISS proposals for contacts to be held in the January - June 2012 timeframe. Five primary schools as well as several alternate schools were selected. The schools were notified of their status and ARISS mentors are currently being assigned to assist the schools in preparing for their contacts.

4. ARISS Member Gives ARISSat Interview

On September 6, Steve Bible, N7HPR appeared on Ham Nation to talk about ARISSat-1 and AMSAT. The interview, episode 16, may be viewed

on TWiT.TV. See: http://twit.tv/show/ham-nation/16

5. Amateur Radio Newsline on ISS Crew

On September 9, the Amateur Radio Newsline Report 1778 included two ARISS items under "Ham Radio in Space." The first story gives a short status on ARISSat-1and the second item talks about how the ISS crew may be affected by the failed launch of Progress 44 in August. To view "ARISSat-1 Celebrates its First Month Onorbit" and "ISS Could be Vacated if Russian Launch Vehicle Problem not Resolved Quickly," see: ftp://ftp.arnewsline.org/quincy/News/news.txt

6. Astronaut Training Status

Four simulated ARISS contacts are scheduled for September 21 between the following schools and astronauts:

Euro Space Center, Belgium at 13:20 UTC - Chris Hadfield, KC5RNJ/VA3OOG
Manhattan Challenger Learning Center (CLC) at 14:05 UTC - Kevin Ford, KF5GPP
CLC of Indianapolis at 14:30 UTC - Tom Marshburn, KE5HOC
CLC of Alaska at 15:50 UTC- Chris Cassidy, KF5KDR

These training sessions are terrestrial-based amateur radio contacts using ARISS equivalent equipment. The sessions will prepare the astronauts for participation in ARISS contacts during their upcoming missions on the ISS.

7. ARRL Article on ISS Astronauts

The American Radio Relay League (ARRL) ran a story in its September 8 ARRL Letter about NASA's need to hire more astronauts. The story went on to talk about the possibility of abandoning the ISS if the Russians do not resolve the issues associated with the Progress 44 launch. See: http://www.arrl.org/news/report-calls-on-nasa-to-hire-more-astronauts

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Dee Interdonato, NB2F

128. Weekly Highlights of Solar and Geomagnetic Activity, 12 - 18 September 2011

Newsgroup: rec.radio.amateur.space
Date: 2011-09-20 21:30:07 UTC
From: SWPC.Webmaster@noaa.gov
Message-ID: <20110920213001.998CB33C78@panix2.panix.com>
Source record: 254
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.info

:Product: Weekly Highlights and Forecasts
:Issued: 2011 Sep 20 2026 UTC
Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
Product description and SWPC contact on the Web
http://www.swpc.noaa.gov/weekly.html
#
Weekly Highlights and Forecasts
#
Highlights of Solar and Geomagnetic Activity
12 - 18 September 2011

Although by September 15th there were 11 numbered regions on the visible solar disk, solar activity was low. Region 1289 (N23, L=129, class/area, Dho/450 on 10 September) was the largest region but only managed to produce low level C-flare activity. Region 1297 (S18, L=151, class/area, Dao/60 on 16 September), numbered on the 14 September, was the most active region during the period. The region produced 12 flares, including a C9/1F on 14 September at 2051 UTC, before decaying to plage late on the 17 September. Regions 1295 (N22, L=060, class/area, Dhc/300 on 18 September) and 1290 (S15, L=139, class/area, Dsi/070 on 12 September) also produced C9 flares; a long duration C9 at 12/2054 UTC and a C9/Sf at 16/1136 UTC respectively. The remaining regions produced only low to mid level C-class activity.

The only earth-directed coronal mass ejection (CME) of the week was linked to an eruption on the 13 September in the vicinity of Region 1289 (N24W25). The full halo CME was observed in SOHO / LASCO C2 imagery at 14/0000Z with an estimated plane-of-sky speed of 428 km/s which was later refined to approximately 600 km/s using STEREO COR2 imagery.

No proton events were observed at geosynchronous orbit.

The geomagnetic field ranged from quiet to active levels at mid latitudes and briefly reached severe storm levels at high latitudes. The week began with unsettled to active levels at middle latitudes with active to major storm conditions at higher latitudes as the geomagnetic field continued to be influenced by a geoeffective coronal hole high speed stream (CH HSS). Disturbed conditions continued until mid day on the 13 September. By 14 September, the geomagnetic field had returned to quiet levels as the effects of the high speed stream waned. Quiet conditions persisted until 17 September when the CME from 13 September arrived at earth. The CME

passage was first observed at the ACE spacecraft at 17/0256 UTC followed by a 21 nT sudden impulse at the Boulder magnetometer. The geomagnetic field reacted with unsettled to active conditions at mid latitudes and periods of major to severe storm levels at high latitudes. Mostly quiet conditions returned by 18 September with two active periods observed mid-day at high latitudes.

The greater than 2 MeV electron flux at geosynchronous orbit reached high levels 12-17 September.

Forecast of Solar and Geomagnetic Activity
21 September - 17 October 2011

Solar activity is expected to be at low to moderate levels from 21 - 23 September. On 24 September - 08 October, activity is expected to increase to moderate levels with a slight chance for major flare activity as old Region 1283 (N14, L=226) rotates onto the visible disk. Solar activity is expected to return to predominantly low to moderate levels for the remainder of the period.

No proton events are expected at geosynchronous orbit until 23 September. There is a slight chance for a proton enhancement from 24 September until 08 October as old Region 1283 returns to the visible disk. No proton events are expected from 09 October until the end of the period.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at mostly normal to moderate levels. High levels are expected on 26 - 28 September and again on 02-03, 11-13 October due to influences from coronal hole high speed streams.

Geomagnetic field activity is expected to be mostly from 21 - 25 of September. Unsettled conditions are expected on 25 and 27 September due to CH HSS activity. On 30 September to October 01, a recurrent CH-HSS is expected to bring unsettled to occasionally active periods of geomagnetic activity. Mostly quiet conditions are expected again until 08 October when another recurrent CH HSS is expected to become geoeffective. Unsettled to Active conditions are expected with minor storm periods possible at high latitudes until 11 October. Mostly quiet conditions are expected from 12 October through the end of the period.

129. satellites

Newsgroup: rec.radio.amateur.space
Date: 2011-09-22 15:04:13 UTC
From: kc9bzc <kc9bzc@yahoo.com>
Message-ID: <j5fipdure1@speranza.aioe.org>
Source record: 255

As i am new to this, and I did some research and found most are dead.
So what up there is working and on what freq's?

any Help is welcome

Bill

130. Re: satellites

Newsgroup: rec.radio.amateur.space
Date: 2011-09-22 15:14:49 UTC
From: Rob <nomail@example.com>
Message-ID: <slrnj7mk79.vor.nomail@xs8.xs4all.nl>
Source record: 256

kc9bzc <kc9bzc@yahoo.com> wrote:
>
> As i am new to this, and I did some research and found most are dead.
> So what up there is working and on what freq's?
>
> any Help is welcome

Did you read the weekly bulletin on this newsgroup?
It extensively list the operating status of all satellites.

131. Re: satellites

Newsgroup: rec.radio.amateur.space
Date: 2011-09-22 20:08:05 UTC
From: kc9bzc <kc9bzc@yahoo.com>
Message-ID: <j5g4j5$m3d$1@speranza.aioe.org>
Source record: 257

On Thu, 22 Sep 2011 15:14:49 +0000, Rob wrote:

> kc9bzc <kc9bzc@yahoo.com> wrote:
>>
>> As i am new to this, and I did some research and found most are dead.
>> So what up there is working and on what freq's?
>>
>> any Help is welcome
>
> Did you read the weekly bulletin on this newsgroup? It extensively list
> the operating status of all satellites.

Yes I did but not much help, is there a database of sat and freq's to
download?

132. Re: satellites

Newsgroup: rec.radio.amateur.space
Date: 2011-09-22 20:33:33 UTC
From: Patty Winter <patty1@wintertime.com>
Message-ID: <4e7b9b9d$0$1672$742ec2ed@news.sonic.net>
Source record: 258

In article <j5g4j5$m3d$1@speranza.aioe.org>, kc9bzc <kc9bzc@yahoo.com> wrote:
>On Thu, 22 Sep 2011 15:14:49 +0000, Rob wrote:
>
>> Did you read the weekly bulletin on this newsgroup? It extensively list
>> the operating status of all satellites.
>
>Yes I did but not much help, is there a database of sat and freq's to
>download?

I don't know about a downloadable file, but did you look at the
satellite status page on AMSAT's website?

http://www.amsat.org/amsat-new/satellites/status.php

The nice thing about the weekly updates is that they zero in on
the operational birds, and they have all the uplink/downlink info
in one place.

Patty N6BIS

133. Re: satellites

Newsgroup: rec.radio.amateur.space
Date: 2011-09-23 02:18:25 UTC
From: Glenn <aa5pk@hotmail.com>
Message-ID: <4e7bec73$0$4472$bbae4d71@news.suddenlink.net>
Source record: 259

"kc9bzc" <kc9bzc@yahoo.com> wrote in message news:j5fipdure1@speranza.aioe.org...
>
> As i am new to this, and I did some research and found most are dead.
> So what up there is working and on what freq's?
>
> any Help is welcome
>
> Bill

You might find this site useful also: http://oscar.dcarr.org/index.php

73
Glenn AA5PK

134. ANS-268 AMSAT News Service Weekly Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2011-09-25 14:20:52 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <001c01cc7b21$ee542190$cafc64b0$@net>
Source record: 260
Cross-posted to: rec.radio.amateur.space,rec.radio.info

AMSAT NEWS SERVICE
ANS-268

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* Invitation to Participate in the ARISSat-1/KEDR Operations Survey
* Frank Bauer, KA3HDO Retires From NASA After 36 Years
* AO-51 to support 54th Jamboree On The Air October 15-16, 2011
* Symposium Reminders!
* Portable Satellite Operations Qualify for Reverse-VUCC Award
* Mobile Satellite Operation From Island of Skye On-The-Air Now
* AMSAT Member N8MS in Newspaper Feature With Students
* Special Event NW2C 911 Portable Satellite Station Video Posted
* Satellite Shorts From All Over

SB SAT @ AMSAT $ANS-268.01
Invitation to Participate in the ARISSat-1/KEDR Operations Survey

AMSAT News Service Bulletin 268.01
>From AMSAT HQ SILVER SPRING, MD.
September 25, 2011
To All RADIO AMATEURS
BID: $ANS-268.01

Steven Bible, N7HPR says that the ARISSat-1 Team has put together a survey on ARISSat-1 operations. Please take a few minutes to answer the questions at https://www.surveymonkey.com/s/arissat1-operation. The survey results will be posted to the Official ARISSat-1 website: http://www.arissat1.org.

Meanwhile, Alan Biddle says the ARISSat-1/KEDR Team is still looking for entries in the Chicken Little Contest. This involves your prognos-tications/calculations/guesses/darts-in-the-calendar submissions for when ARRISSat-1/KEDR makes its final orbit. We have a fair number of submissions from all over the world from adults, but very few from students. If you know of one who might be interested, encourage them to enter. The details are here:

http://www.amsat.org/amsat-new/ARISSat/ARISSatContest

While it is not going to receive the coverage of UARS, the closest submissions in each category will be recognized. Right now, the deadline is the 15th of October, though since ARISSat-1 is "floating like a butterfly" that MIGHT get extended.

/EX

SB SAT @ AMSAT $ANS-268.02
Frank Bauer, KA3HDO Retires From NASA After 36 Years

AMSAT News Service Bulletin 268.02
>From AMSAT HQ SILVER SPRING, MD.
September 25, 2011
To All RADIO AMATEURS
BID: $ANS-268.02

After an illustrious 36 year career with NASA, Frank Bauer, KA3HDO, has retired from the agency.

In his farewell note to his colleagues, Bauer said that for someone who dreamed about space exploration as a very young child and started at NASA when the Apollo program was in its twilight, it has been truly a pleasure to spend over 3 decades developing and operating systems as part of the NASA team. Bauer said that he has had what he called a phenomenal time contributing to countless Human and Robotic spacflight missions, flight tests, technology experiments, pioneering systems, studies, formulations and on-orbit operations activities as well as numerous agency-level, U.S. Government and international strategies and initiatives.

In addition to his job with NASA, KA3HDO, had a parallel volunteer career as one of the leaders of the manned Amateur Radio in Space program. Among his many achievements was taking manned ham radio operations on-orbit from the now retired space shuttles under the SAREX operation over to the International Space Station and into the ARISS program.

Bauer, who stepped down from ARISS and AMSAT duties in March of 2009, had served as ARISS Program Leader and ARISS International Working Group Chair. Since 1991, he had also held the title of AMSAT Vice President for Human Spaceflight Programs.

In May of 2009 Bauer was presented with the ARRL President's Award for his many contributions to ham radio's part of mans exploration of space.

[ANS thanks the Amateur Radio Newsline Report 1780 - September 23 2011 for the above information]

/EX

SB SAT @ AMSAT $ANS-268.03
AO-51 to support 54th Jamboree On The Air October 15-16, 2011

AMSAT News Service Bulletin 268.03
>From AMSAT HQ SILVER SPRING, MD.
September 25, 2011
To All RADIO AMATEURS
BID: $ANS-268.03

The AO-51 Command Team is happy to announce support of the Scouting Jamboree On The Air (JOTA) during the weekend Oct. 15-16, 2011. The AO-51 satellite will remain in its current configuration, with an understanding that contacts involving Scouts will be given first priority during this period.

The current operating mode of AO-51 is as follows:

Uplink: 145.880 MHz FM (No PL tone)
Downlink: 435.150 MHz FM

The World Scouting Organization in Switzerland posted JOTA information on their web: http://tinyurl.com/3rfp2cn (www.scout.org) and http://scout.org/information_events/events/jota/the_54th_jota_2011

Also, visit the World Scouting Radio Library at:
http://tinyurl.com/5sz7tf5 (www.scout.org)

The Boy Scouts of America has several resources on-line for amateur radio stations participating in JOTA: http://tinyurl.com/6d93qb7 (Boy Scouts of America www.scouting.org)

[ANS thanks the Scouting Movement and AO-51 Command Team for the above information]

/EX

SB SAT @ AMSAT $ANS-268.04
Symposium Reminders!

AMSAT News Service Bulletin 268.04
>From AMSAT HQ SILVER SPRING, MD.
September 25, 2011
To All RADIO AMATEURS
BID: $ANS-268.04

2011 AMSAT Space Symposium Papers Deadline Approaches

Your papers for the 2011 AMSAT Space Symposium are due by October 1 for inclusion in the printed proceedings. Yes, that's just a couple of weeks from now! Papers should be sent to Dan Schultz, N8FGV, at: n8fgv@amsat.org.

Symposium Registration is Now Open

The 2011 AMSAT Space Symposium will be held on Friday, November 4th

through Sunday, November 6th in San Jose, CA. Our annual gathering
will feature:

+ Space Symposium with Amateur Satellite Presentations
+ Operating Techniques, News, & Plans from the Amateur Satellite World
+ Board of Directors Meeting open to AMSAT members (Nov. 3-4)
+ Meet Board Members and Officers
+ Annual General Membership Meeting
+ Annual Banquet-Keynote Speaker and Door Prizes

The 2011 Symposium hotel and registration web pages are now available
on the AMSAT web site. You may register for the Symposium and Annual
Banquet at the AMSAT Store:
http://www.amsat-na.com/store/SymposiumReg.php

Visit the Symposium and Annual General Meeting web page for details
and the latest information:
http://www.amsat.org/amsat-new/symposium/2011/index.php

Symposium Registration including a copy of the Proceedings is:
+ $50 per person starting September 20, 2011
+ $55 per person at the door

The Saturday evening banquet is $45 per person. The Sunday morning
Area Coordinator's Breakfast is $15 per person.

Hotel information for the Wyndham San Jose is posted at:
http://www.amsat.org/amsat-new/symposium/2011/Hotel.php

Martha at the AMSAT Office (Phone: 301-589-6062) is available to
be of assistance with any hotel questions or problems with your
registration.

[ANS thanks the 2011 Symposium Committee for the above information]

/EX

SB SAT @ AMSAT $ANS-268.05
Portable Satellite Operations Qualify for Reverse-VUCC Award

AMSAT News Service Bulletin 268.05
>From AMSAT HQ SILVER SPRING, MD.
September 25, 2011
To All RADIO AMATEURS
BID: $ANS-268.05

The Central States VHF Society has updated their website to reflect
applications for VUCC-r, Reverse VUCC.

This award is given to those who have operated via satellites in more
than 100 grids away from their home grid.

The rules require that applicants submit proof of contacts made from
these away from home grids. So if you work someone signing "portable"
(meaning they are operating away from home), please remember to in-

clude your grid as well as the grid they were operating from on your QSL. You can read all the details on-line at: http://www.csvhfs.org/vuccdesc.html

There are now four operators who have achieved VUCC-r distinction: N7SFI-200 grids, N5AFV-109 grids, ND9M-325 grids, and KD4ZGW-100 grids.

[ANS thanks John, K8YSE and CSVHFS for the above information]

/EX

SB SAT @ AMSAT $ANS-268.06
Mobile Satellite Operation From Island of Skye On-The-Air Now

AMSAT News Service Bulletin 268.06
>From AMSAT HQ SILVER SPRING, MD.
September 25, 2011
To All RADIO AMATEURS
BID: $ANS-268.06

Paul, 2E1EUB will be active on satellites as 2M1EUB, depending on the weather, from the Island of Skye in western Scotland beginning on September 24 for one week. This will be from grid IO67vj.

During Paul's second week of mobile satellite operations he plans to operate from the eastern side of Scotland.

Paul advises that mobile/portable internet coverage is spotty in these locations but he will attempt access occasionally. He has posted more informaion on his 2M1EUB information at http://www.qrz.com

[ANS thanks Paul, 2E1EUB for the above information]

/EX

SB SAT @ AMSAT $ANS-268.07
AMSAT Member N8MS in Newspaper Feature With Students

AMSAT News Service Bulletin 268.07
>From AMSAT HQ SILVER SPRING, MD.
September 25, 2011
To All RADIO AMATEURS
BID: $ANS-268.07

Matt Severin, N8MS, principal of Dowagiac Middle School in Michigan, took some of his students outside to track and listen to the satellite ARISSat-1 on Tuesday, September 13.

Two years earlier, Severin, then principal of Sister Lakes Elementary School, had a picture taken of the students and submitted it to be flown on ARISSat.

On Tuesday, the students were able to track the satellite, listen to greetings in several languages and receive telemetry as well as SSTV (Slow Scan Television) images with a goal to promote STEM (Science,

Technology, Engineering and Math). The Daily News posted a story on this activity: http://tinyurl.com/3z39yst (www.dowagiacnews.com)

Matt is also an instructor in the ARRL Teacher Institute and has helped several other educators bring STEM education, based on amateur radio and satellites, into their classroom.

Student submissions for ARISSat were stored on a memory chip that was attached to ARISSat-1 and are flying along with the craft as it orbits the Earth. The student projects and photos can all be viewed ARISS Europe web site at: http://www.ariss-eu.org/arissat-1.htm

[ANS thanks the ARISS Status Report and Carol, KB3LKI for the above information]

/EX

SB SAT @ AMSAT $ANS-268.08
Special Event NW2C 911 Portable Satellite Station Video Posted

AMSAT News Service Bulletin 268.08
>From AMSAT HQ SILVER SPRING, MD.
September 25, 2011
To All RADIO AMATEURS
BID: $ANS-268.08

Pete, WB2OQQ operated a portable satellite station on September 11 using the call NW2C, at Historic Fort Totten, located in Bayside New York, only a few miles from ground zero. Fort Totten was one of many placed used in recovery and healing during 911.

Pete operated all available FM satellite passes that day. For those that made a confirmed satellite contact and wish to receive a Certificate of Confirmation, visit: http://www.nw2c.org/911.html.

A video tribute is posted at: http://vimeo.com/29077529

[ANS thanks Pete, WB2OQQ for the above information]

/EX

SB SAT @ AMSAT $ANS-268.09
Satellite Shorts From All Over

AMSAT News Service Bulletin 268.09
>From AMSAT HQ SILVER SPRING, MD.
September 25, 2011
To All RADIO AMATEURS
BID: $ANS-268.09

+ Videos and slides from the Summer CubeSat Developers' Workshop, held August 6-7 at the 25th Annual AIAA/USU Conference on Small Satellites, are now available for download:
http://tinyurl.com/3sgnrn3 (AMSAT-UK)

+ The well publicized re-entry of the UARS satellite may have already occurred at press time. An interesting video simulation of the re-entry can be viewed at:
http://www.youtube.com/watch?v=5laK2JopaVE&feature=player_embedded

+ An interesting article about three recently declassified American spy satellites can be read at:
http://spaceflightnow.com/news/n1109/19nrodeclassified/

+ The NASA Education Express Message for September 22, 2011 reports that registration is open for the Team America Rocketry Challenge 2012. This a national model rocket competition for U.S. students in grades 7-12. Teams of three to 10 students are challenged to design, build and fly a model rocket that will climb to 800 feet with a payload of two raw eggs and stay aloft for 43 to 47 seconds. The payload must then return to earth unbroken. Cash prizes are awarded to the top finishers. NASA invites top teams to participate in their Student Launch Initiative, an advanced rocketry program. Participation is limited to the first 1,000 teams who register by November 30, 2011. For more information, visit:
http://www.rocketcontest.org/

+ The dates for the next Hudson Valley Satcom nets are September 29, October 13, and October 27 at 8:00 PM Eastern Daylight Time (UTC - 4). You can tune in via the 146.970 MHz Mt. Beacon repeater, PL 100.0 or via EchoLink on the N2EYH-L node. More info is available at: http://www.hvsatcom.org (Stu, WA2BSS)

+ A new video from NASA's Dawn spacecraft takes you on a flyover journey above the surface of the giant asteroid Vesta. The data obtained by Dawn's framing camera, used to produce the visualizations, will help scientists determine the processes that formed Vesta's striking features. It will also help Dawn mission fans all over the world visualize this mysterious world, which is the second most massive object in the main asteroid belt. The video and article is posted at:
http://tinyurl.com/3tn932m (science.nasa.gov)

+ NASA has made historic and interesting sounds and sound bites from space missions available for download as ringtones or on your computer for events, errors, alarms and notifications. These are available in both MP3 and M4R (iPhone) files. To listen to and download the sounds, visit: http://www.nasa.gov/connect/sounds
The NASA App for Android allows users to easily preview and set the sounds as ringtones can be found at:
https://market.android.com/details?id=gov.nasa

+ Radio-Electronics.com provides concise guides, information, tutorials and data about radio frequency, RF, technology and RF design on their Radio Frequency, RF, Technology and Design pages at:
http://www.radio-electronics.com/info/rf-technology-design

[ANS thanks everyone for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office. And with that, please keep in mind the ham who discovered that a positive attitude may not solve all his problems, but it certainly annoyed enough people to make it worth his effort.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

135. Weekly Highlights of Solar and Geomagnetic Activity, 19 - 25 September 2011

Newsgroup: rec.radio.amateur.space
Date: 2011-09-28 01:30:06 UTC
From: SWPC.Webmaster@noaa.gov
Message-ID: <20110928013002.3DA6E33C8E@panix2.panix.com>
Source record: 261
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.info

```
:Product: Weekly Highlights and Forecasts
:Issued: 2011 Sep 27 2159 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
# Weekly Highlights and Forecasts
#
Highlights of Solar and Geomagnetic Activity
19 - 25 September 2011

Solar activity ranged from low to high levels during the period.
Activity was low during 19 - 20 September with C-class flares from
Regions 1295 (N22, L = 057, class/area Ekc/550 on 23 September),
1296 (N26, L = 040, class/area Dai/130 on 15 September), and 1301
(N19, L = 330, class/area Eso/210 on 21 September). Activity
increased to moderate levels on 21 September due to an M1 x-ray
flare at 21/1223Z. A further increase to high levels occurred on 22
September with an X1/2n flare at 22/1101Z from Region 1302 (N12, L =
282, class/area Fkc/1300 on 24 September) as it rotated into view.
The X1 was associated with Types II/IV radio sweeps, a Tenflare, and
a non-Earth-directed CME. Activity decreased to moderate levels on
23 September with low-level M-class flares from Regions 1295 and
1302. Activity returned to high levels on 24 September with three
major flares from Region 1302: an X1/2b at 24/0940Z associated with
Types II/IV radio sweeps, a Tenflare, and a halo-CME; an M7/1f at
24/1320Z, with a much faster partial halo CME that appears to
overtake the previous CME; and an M5 at 24/2036Z. Finally, an M3
flare from Region 1302 at 24/1921Z had an associated Type II sweep,
Tenflare, and partial-halo CME (estimated P.O.S. speed 632 km/s).
Activity decreased to high levels on 25 September with Region 1302
and 1303 (S28, L = 034, class/area Cso/070 on 25 September) both
producing multiple M-class events.

A greater than 10 MeV proton event at geosynchronous orbit began at
23/2255Z in response to the X1 flare on 22 September and was in
progress at the close of the summary period.

The greater than 2 MeV electron flux at geosynchronous orbit was at
normal to moderate levels during 19 - 21 September. Fluxes decreased
to normal levels during 22 - 25 September.

Geomagnetic activity was at quiet levels during most of the period.
```

Forecast of Solar and Geomagnetic Activity
28 September - 24 October 2011

Solar activity is expected to be at moderate to high levels with more major flare activity from Region 1302 until it crosses the west limb on 03 October. Activity is expected to decrease to low levels during 04 - 19 October.On 20 October, activity is expected to increase to low - moderate levels with the return of Region 1302 for the remainder of the forecast period.

There will be a chance for another proton flare from Region 1302 until it departs the visible disk on 04 October. No proton events are expected at geosynchronous orbit for the remainder of the period.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at normal to moderate levels during 28 September - 03 October. An increase to normal to high flux levels is expected during 04 - 05 October due to CH HSS effects. Normal to moderate fluxes are expected during 06 - 10 October as CH HSS effects subside. Fluxes are expected to rise to normal to high levels from 11 - 15 October due to CH HSS effects. 1A return to normal to moderate background levels is expected from 16 - 24 October.

Geomagnetic activity is expected to be at unsettled to active levels on 28 September as CME effects subside. A decrease to quiet levels is expected on 29 - 30 September. Activity is expected to increase to quiet to unsettled levels during 01-02 October due to a coronal hole high-speed stream (CH HSS). A return to quiet levels is expected during 02 - 07 October. Activity is expected to increase to quiet to active levels during 08 - 11 October as another CH HSS disturbs the field. A return to predominantly quiet levels is expected for the remainder of the period.

136. Crossposting Permitted to rec.radio.amateur.moderated

Newsgroup: rec.radio.amateur.space
Date: 2011-10-01 06:00:02 UTC
From: rram@panix.com
Message-ID: <radio/ham-radio/moderated/crossposting-1-1317448801@panix.com>
Source record: 262
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.info

```
Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/moderated/crossposting
Revision: 1.1 2009/04/12 19:42:04
Posting-Frequency: posted monthly
URL: http://www.panix.com/~rram/usenet/rram/index.html

Changes followed by "|".

After a 30-day public discussion and feedback period to gauge reader
opinions in March of 2009:

http://groups.google.com/group/rec.radio.amateur.moderated/browse_thread/thread/d7d337db35
f23326

the rec.radio.amateur.moderated Moderation Team has decided to consider
amending its charter, and permit limited simultaneous crossposting to
rec.radio.amateur.moderated and one other unmoderated
amateur-radio-related discussion newsgroup. We are currently trying
this on a temporary basis (90 days, through early July 2009), and adopt
it permanently if successful.

Approved rec.radio.amateur.* newsgroups are those that are currently
listed in the latest version of the "List of Big Eight Newsgroups" which
is crossposted monthly to news.announce.newgroups, news.groups, and
news.lists.misc.

Approved alt.radio.amateur.* and alt.ham-radio.* newsgroups are those
that have been created consistent with the suggestions in "So You Want
to Create an Alt Newsgroup" at:

http://www.faqs.org/faqs/alt-creation-guide/

Approved regional hierarchy newsgroups are those that contain either
"radio.amateur" or "ham-radio" in their names, including
uk.radio.amateur and aus.radio.amateur.misc.

We will make every reasonable effort to keep our list of approved
newsgroups up-to-date. In case we have overlooked any, and a submission
is rejected in error as a result, the rejected submitter can E-mail us
at our administrative contact address (in the signature at the bottom of
this article, and the default Reply-To for the rejection message)
requesting that it be added, and that the article be approved. We may
still choose to reject articles crossposted to any alt.* newsgroup with
an inappropriate name, including obscene language, embedded
name-calling, or encouragement of unlawful conduct.
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Please direct any comments, questions, or criticisms to
rec-radio-amateur-moderated-request@panix.com.

137. ANS-275 AMSAT News Service Weekly Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2011-10-02 14:10:41 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <000e01cc810d$0dc08320$29418960$@net>
Source record: 263
Cross-posted to: rec.radio.amateur.space,rec.radio.info

AMSAT NEWS SERVICE
ANS-275

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* Lance Ginner, K6GSJ 2011 AMSAT Symposium Banquet Speaker
* OSCAR 1 Prototype Will Be Operating at the 2011 Symposium
* Auburn University AubieSat-1 Scheduled for Launch from Vandenberg
* K6LCS Satellite Presentation at the Anchorage Hamfest
* ARISS Status - 26 September 2011

SB SAT @ AMSAT $ANS-275.01
Lance Ginner, K6GSJ 2011 AMSAT Symposium Banquet Speaker

AMSAT News Service Bulletin 275.01
From AMSAT HQ SILVER SPRING, MD.
October 2, 2011
To All RADIO AMATEURS
BID: $ANS-275.01

AMSAT is privileged to have Lance Ginner, K6GSJ as our banquet speaker. As AMSAT and the amateur radio community celebrate the 50th anniversary of the launch of OSCAR 1 (placed in orbit on 12 DEC 61), we look forward to Lance's remarks about how OSCAR 1 was developed and the impact of amateur radio satellites on his professional career. We will hear about the personal, technical, political, and security issues regarding the early OSCARs.

First licensed in 1954 at the age of 16, Lance started his amateur career as a novice (KN6GSJ) and quickly upgraded to become K6GSJ, the same general class license he holds today. Following his graduation from college in 1959, he joined Lockheed Missiles and Space Division in Sunnyvale, CA.

While at Lockheed, Lance became involved with Chuck Towns, K6LFH and others in Project Oscar and helped build OSCAR 1 (Launched on 12 DEC 61) and OSCAR 2 (Launched on 2 JUN 62) and test and integrate

those spacecraft to the Discoverer host vehicle. OSCAR 1 became one of the first free flying 'secondary payloads' to be flown into space.

Lance's involvement with amateur radio spacecraft continued with his work with OSCAR 3, OSCAR 4, OSCAR 5 (the first for the newly formed Radio Amateur Satellite Corporation in 1970), OSCAR 6, OSCAR 7, and OSCAR 8.

Lance's involvement with the early OSCAR satellites continued with AMSAT, working with Jan King, W3GEY (AMSAT VP-Engineering), Perry Klein, W3PK (AMSAT's first President), and Dick Daniels, W4PUJ (AMSAT Propulsion).

You are invited to read more of Lance's career as one of Amateur Radio in Space pioneers on the 2011 Symposium web page: http://www.amsat.org/amsat-new/symposium/2011/BanquetSpeaker.php

[ANS thanks the 2011 Symposium Committee for the above information]

/EX

SB SAT @ AMSAT $ANS-275.02
OSCAR 1 Prototype Will Be Operating at the 2011 Symposium

AMSAT News Service Bulletin 275.02
From AMSAT HQ SILVER SPRING, MD.
October 2, 2011
To All RADIO AMATEURS
BID: $ANS-275.02

The AMSAT 2011 AMSAT Space Symposium will be held on Friday, November 4th through Sunday, November 6th at the Windham Hotel in San Jose, California. This year's Symposium coincides the celebration of the 50th anniversary of OSCAR 1.

Symposium Banquet Speaker and OSCAR 1 developer Lance Ginner, K6GSJ provided Bob Allison, WB1GCM of ARRL's Technical Lab and his team with technical advice to help getting the satellite operational again. Bob will also be at the Symposium and will give a brief talk on the refurbishment process.

The refurbished OSCAR-1 was on display at the ARRL exhibit area at the 2011 Dayton Hamvention. We look forward to having the OSCAR 1 prototype on display during the AMSAT Symposium as well as hear the CW transmissions (now managed by a PIC controller) in the 145 MHz band.

Additionally, the AMSAT News Service will re-run the weekly Project OSCAR Newsletters to commemorate the 50th anniversary of OSCAR 1. During the November/December 2011 time frame you will be able to share the excitement of the launch campaign that started it all 50 years ago.

Watch for the re-publication of the Project OSCAR Newsletters in the AMSAT Journal. The Newsletters were hand-typed back in 1961. Thanks to Don Ferguson, KD6IRE for scanning the original documents announcing OSCAR 1.

[ANS thanks the 2011 Symposium Committee for the above information]

/EX

SB SAT @ AMSAT $ANS-275.03
Auburn University AubieSat-1 Scheduled for Launch from Vandenberg

AMSAT News Service Bulletin 275.03
From AMSAT HQ SILVER SPRING, MD.
October 2, 2011
To All RADIO AMATEURS
BID: $ANS-275.03

JM Wersinger, PhD, KI4YAU, Professor Emeritus and Director of Auburn University Student Space Program in Alabama wrote this week, "We fervently request your assistance in receiving transmissions from an upcoming satellite, AubieSat-1, immediately after its launch from Vandenberg AFB, California, 25 October 2011 at 9:52 UTC. AubieSat-1 (AS-1) is an undergraduate - built CubeSat satellite developed by Auburn University.

AS-1 is designed to transmit with a power of about 800 milliwatts on a frequency of 437.475 MHz, plus or minus Doppler correction. The beacon signal, along with telemetry, will be sent using A1A continuous wave Morse code at 20 words per minute. Additional telemetry from the on board science experiment will use CW transmissions up to 60 WPM.

Based on the pre-launch orbital data provided by NASA, AS-1 will activate after deployment at 12:21 UTC, 25 October 2011. At that time, the sub-satellite point will be at 34.52 S latitude and 1.52 W longitude over the South Atlantic Ocean. Our predictions are that the first flights over the contiguous United States will begin as shown in the following table:

Orbit	AOS	Elevation	LOS	General Locale
3	15:54 UTC	>50 deg	16:01 UTC	New York
4	17:28 UTC	>26 deg	17:35 UTC	Texas
5	19:07 UTC	>48 deg	19:14 UTC	California

This information will be updated should there be launch scrubs or performance changes in the launch, and additional information will be available upon request for specific locations. Reception reports with data contents are welcomed to the following email addresses:
wersijp at auburn dot edu and tam0013 at auburn dot edu

An internet Echolink conference group is also planned to begin one-half hour prior to launch and continue until about 30 minutes after confirmation of the first receipt of signals from the satellite. Information

on the conference groups title will be distributed nearer to the launch for interested stations.

Please email wersijp at auburn dot edu if you require additional information and can assist in the reception and tracking
of AubieSat-1.

Long-time AMSAT Member John Klingelhoeffer, WB4LNM serves as the Technical Advisor in Auburn University's Student Space Program.

[ANS thanks Professor Wersinger, KI4YAU at Auburn University for the above information].

/EX

SB SAT @ AMSAT $ANS-275.04
K6LCS Satellite Presentation at the Anchorage Hamfest

AMSAT News Service Bulletin 275.04
From AMSAT HQ SILVER SPRING, MD.
October 2, 2011
To All RADIO AMATEURS
BID: $ANS-275.04

Craig Bledsoe, KL4E of the Anchorage Amateur Radio Club (AARC) noted their September 17 Hamfest featured a first ever remotely-delivered keynote presentation by Clint Bradford, K6LCS.

In order to facilitate this full-duplex two-way video Skype conference between Clint's studio in Riverside, California and the Anchorage Hamfest a team of hams assembled the technology to make this happen.

Led by Rich Gillin, AL4S, and Eric Thompson, N6SPP, the team installed an AT&T active remote phased-array WiMax antenna at the hamfest and aimed it towards the AT&T Alascom headquarters on Government Hill many miles away. The resultant broadband signal enabled Clint to present over a hundred PowerPoint slides through a laptop computer and projection system while his audio was delivered via a Skype connection. Two way internet video streaming allowed the audience to see Clint and he was able to see the crowd at the Hamfest.

Clint delivered a fascinating look across the spectrum of amateur satellite operations. From the earliest days of the first OSCAR satellites first launched over a half-century ago to the organization of AMSAT and today's comprehensive international efforts to get the latest amateur technologies into outer space, his presentation covered it all.

Clint also taught the basics, showing step-by-step how a beginning ham can use a simple handheld radio and antenna to work the satellites with great success.

In addition to all of the on-line satellite discussions, the AARC also conducted real-life satellite QSOs from the hamfest before and after Clint's presentation. Using AO-27, SO-50, and AO51 the host operators

N6SPP and KL4E worked over a dozen amateur satellite stations in three countries. Then a number of guest operators who were attending the Hamfest got on board as well. Several visiting hams made their first satellite QSOs that day - and they were thrilled!

All-in-all everyone had a great time at the Anchorage Amateur Radio Club Hamfest, and many visitors said that they thoroughly enjoyed Clint's presentation.

Clint's satellite pages can be found at: http://www.work-sat.com

[ANS thanks Craig Bledsoe, KL4E of the Anchorage Amateur Radio Club for the above information]

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SB SAT @ AMSAT $ANS-275.05
ARISS Status - 26 September 2011

AMSAT News Service Bulletin 275.05
From AMSAT HQ SILVER SPRING, MD.
October 2, 2011
To All RADIO AMATEURS
BID: $ANS-275.05

1. First ARISS Contact for Louisiana

On Thursday, September 22, the first Amateur Radio on the International Space Station (ARISS) contact to be held in Louisiana took place between students attending Kiroli Elementary School in West Monroe and Satoshi Furukawa, KE5DAW on the ISS. Approximately 500 students were on hand for the event. Representatives from the school board, the American Radio Relay League (ARRL) and the media were also present. The contact was a featured activity held in conjunction with a well developed education plan covering space and communications. The University of Louisiana at Monroe (ULM) will open its observatory in an upcoming month to Kiroli Elementary to allow students to view various celestial bodies and events, as well as the planets and stars within our solar system. Contact information and links to articles, video and audio may be found on this Web site:
http://www.cs.ulm.edu/~pdw/KiroliARISS/

2. ARISS International Team Teleconference Held

The ARISS monthly teleconference was held on Tuesday, September 20. Among the agenda items discussed were the upcoming Houston face-to-face meeting and the HamTV project that ESA plans to support through a contract with Kayser-Italia. The Project Selection and Use committee will discuss HamTV and a second Kenwood radio for the Columbus module once the proposals are submitted. Minutes have been posted. See: http://www.rac.ca/ariss/arisstel2011-09-20.htm

3. Astronaut Training Status

Three simulated ARISS contacts were held on Wednesday, September 21. Chris Hadfield, KC5RNJ/VA3OOG spoke with youth at the Euro Space Camp in Belgium. Kevin Ford, KF5GPP contacted the Manhattan Challenger Learning Center (CLC) and Tom Marshburn, KE5HOC answered questions from students at the CLC of Indianapolis. The training sessions were terrestrial-based amateur radio contacts using ARISS equivalent equipment that will prepare the astronauts for participation in ARISS contacts during their upcoming missions on the ISS. Ford is slated to launch with Expedition 33 in September 2012 and Hadfield and Marshburn are scheduled to fly with Expedition 34 in November 2012.

4. EE Times - ARISSat Blog

On September 17, a new entry was made to the EE (Electronic Engineering) Times "Chips in Space" blog about amateur radio satellite ARISSat-1. This week the blog covers the project's lessons learned. See: http://eetimes.com/electronics-blogs/other/4227392/Chips-in-Space--Lessons-learned--Part-1

5. World Radio Magazine Covers ARISSat-1

The World Radio Magazine October 2011 issue featured an article about ARISSat-1.

To view the story, "Amateur Satellites: A Bumpy Ride for ARISSat-1 on its Way to
Space," see: http://www.worldradiomagazine.com/

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

138. Weekly Highlights of Solar and Geomagnetic Activity, 26 September - 02 October 2011

Newsgroup: rec.radio.amateur.space
Date: 2011-10-05 01:30:05 UTC
From: SWPC.Webmaster@noaa.gov
Message-ID: <20111005013001.81DF533C8E@panix2.panix.com>
Source record: 264
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.info

```
:Product: Weekly Highlights and Forecasts
:Issued: 2011 Oct 04 2337 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
# Weekly Highlights and Forecasts
#
Highlights of Solar and Geomagnetic Activity
26 September - 02 October 2011

Solar activity ranged from low to moderate levels during the period.
Activity was moderate on 26 September with Region 1302 (N12, L=282,
class/area Fkc/1300 on 24 September) producing a M4/1b event at
26/0508 UTC and a M2/2b event at 26/1443 UTC. Solar activity
decreased to low levels on 27 September before increasing again to
moderate levels on 28 September when Region 1302 produced a M1/1n
event at 28/1328 UTC with an associated Tenflare (320 sfu). Another
decrease to low levels occurred on 29 September before levels
increased once again to moderate levels on 30 September through 02
October. Region 1305 (N12, L-249, class/area Dsi/190 on 2 October)
produced a M1/1f event at 30/1906 UTC. Associated with this event
was a Type II radio sweep with an estimated speed of 690 km/s as
well as a 260 sfu Tenflare. Despite limited STEREO data, a slower
CME is believed to be potentially geoeffective from this event.
Region 1305 produced a M1/1n event at 01/0959 UTC, and produced a
possible earth directed CME, with an associated Type II radio sweep
(estimated speed of 850 km/s), Type IV radio sweep, and a 180 sfu
Tenflare. On 02 October, Region 1305 produced a M3/1n event at
02/0050 UTC that was associated with an Earth directed CME visible
in STEREO imagery with an estimated speed of 532 km/s. Finally,
Region 1302 produced a M1/Sf event at 02/1723 UTC.

A greater than 10 MeV proton event at geosynchronous orbit began at
23/2255 UTC in response to an X1 flare on 22 September, reached a
maximum of 35 pfu at 26/1155 UTC, and ended at 27/0430 UTC. Fluxes
returned to background levels for the remainder of the period.

The greater than 2 MeV electron flux at geosynchronous orbit was at
normal to moderate levels from 26 to 29 September. Fluxes increased
to high levels on 30 September, returned to normal to moderate
levels on 01 October, and back to high levels on 02 October.
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Geomagnetic activity ranged from quiet to severe storm levels during the period. Increased activity on 26 - 28 September was due to effects of an expected CME from 24 September. Increased activity early on 29 September was due to nighttime sub-storms. Increased activity on 01 - 02 October was due to a solar sector boundary crossing (SSBC) prior to the onset of high speed stream (HSS) effects from a favorably positioned coronal hole (CH).

Forecast of Solar and Geomagnetic Activity
05 October - 31 October 2011

Solar activity is expected to be at low to moderate levels during 05 - 15 October with a slight chance for M-class flare activity from Region 1305 until it crosses the west limb on 07 October, and the return of old Region 1295 (N24, L=57) on 08 October. A decrease to low levels is expected during 16 - 17 October after Region 1295 rotates off the west limb. During 18 - 25 October, activity is expected to increase to low to moderate levels with a slight chance for major flare activity as old Region 1302 rotates back onto the visible disk. Activity is expected to return to low levels for the remainder of the forecast period (26 - 31 October) after old Region 1302 rotates off the west limb.

No proton events are expected at geosynchronous orbit from 05 - 17 October. There is a slight chance for a proton enhancement from 18 - 27 October due to the return of old Region 1302. No proton events are expected during 25 - 31 October.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at mostly normal to moderate levels. High levels are expected during 9 - 14 and 28 - 31 October due to influences from coronal hole high speed streams.

Geomagnetic field activity is expected to be mostly unsettled on 05 October due to a CME arrival. Activity is expected to increase to active levels on 06 October due to continued CME effects. Activity is expected to decrease to mostly unsettled levels during 07 - 09 October as effects from the CME subside and a negative polarity coronal hole moves into a geoeffective position. Activity is expected to continue to decrease to mostly quiet levels during 10 - 27 October. During 28 - 30 October, activity is expected to return to mostly unsettled levels due to a positive polarity coronal hole. Finally, activity is expected to decrease to mostly quiet levels on 31 October.

139. Radio Meteor Obs. Bull. September 2011

Newsgroup: rec.radio.amateur.space
Date: 2011-10-07 08:32:03 UTC
From: Chris Steyaert <observations@rmob.org>
Message-ID: <g6et8715m6tf3pn0irsod1vn9ehod74skm@4ax.com>
Source record: 265
Cross-posted to: rec.radio.amateur.space,sci.astro.amateur

Radio Meteor Observation Bulletin No. 218 of September 2011 (83 K) is available now as

http://www.rmob.org/rmobtext/rmob1109.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

Chris

140. FOR ONLY HOT GUYS SEE THIS

Newsgroup: rec.radio.amateur.space
Date: 2011-10-08 13:53:42 UTC
From: devi <satyamsivam9030@gmail.com>
Message-ID: <d1adce93-80a6-4a26-80ca-0e421c8b49dc@v18g2000pri.googlegroups.com>
Source record: 266

FOR GOOD JOBS SITES TO YOU
http://goodjobssites.blogspot.com/

7TH SENSE MOVIE STILLS
http://actressgallery-kalyani.blogspot.com/2011/10/7th-sense-movie-stills.html
MOGUDU MOVIE STILLS
http://actressgallery-kalyani.blogspot.com/2011/09/mogudu-movie-stills.html
HANSIKA MATOWNI LATEST HOT STILLS
http://actressgallery-kalyani.blogspot.com/2011/09/hansika-motwani.html
KAJAL AGARWAL HOT PHOTOS
http://actressgallery-kalyani.blogspot.com/2011/09/kajal-agarwal.html
TAMANNA SIRUTHAI HOT MOVIE STILLS
http://actressgallery-kalyani.blogspot.com/2011/09/siruthai-movie-stills.html
SNEHA HOT GOA MOVIE STILLS
http://actressgallery-kalyani.blogspot.com/2011/09/goa-movie-stills.html
HOT KATRINA KAIF PHOTOS
http://actressgallery-kalyani.blogspot.com/2011/09/katrina-kaif.html
AISHWARYA RAI HOT HQ PHOTO STILLS
http://actressgallery-kalyani.blogspot.com/2011/09/aishwarya-rai.html
ASIN HOT PHOTO GALLERY
http://actressgallery-kalyani.blogspot.com/2011/09/asin.html

FOR ONLY HOT GUYS SEE THIS
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KAJAL AGARWAL LATEST HOT WITHOUT TOP
http://hotactress-kalyani.blogspot.com/2011/08/kajal-agarwal-hot-photos.html
TAMANNA HOT PHOTOS
http://hotactress-kalyani.blogspot.com/2011/08/tamanna-hot.html
PRANITHA LATEST HOT PHOTOS
http://hotactress-kalyani.blogspot.com/2011/09/pranitha-hot.html
HOT KATRINAKAIF WALLPAPERS
http://hotactress-kalyani.blogspot.com/2011/08/katrina-kaif-hot.html
SAMANTHA HOT WALLPAPERS
http://hotactress-kalyani.blogspot.com/2011/09/samantha-hot.html
HOT MALLU ACTRESS BHAMA
http://hotactress-kalyani.blogspot.com/2011/09/bhama-hot.html
TOLLYWOOD HOT ACTRESSES
http://hotactress-kalyani.blogspot.com/2011/08/hot-actrsess.html
SONAKSHI SINHA HOT PHOTOS
http://hotactress-kalyani.blogspot.com/2011/09/sonakshi-sinha-hot.html
PRIYANKA CHOPRA LATEST HOT PHOTOS
http://hotactress-kalyani.blogspot.com/2011/08/priyanka-chopra-hot.html

LATEST AMISHA PATEL HOT PICS
http://hotactress-kalyani.blogspot.com/2011/08/amisha-patel-hot.html
TAPSEE DIFFERENT STILLS
http://hotactress-kalyani.blogspot.com/2011/08/tapsee-hot.html
PRIYAMANI HOT PHOTOS
http://hotactress-kalyani.blogspot.com/2011/09/priyamani-hot.html

KATRINA KAIF HOT IMAGES
http://hotactress-katrina.blogspot.com/2011/08/katrina-kaif-hot.html
TOP 15 HOT BOLLYWOOD KISSES
http://hotactress-katrina.blogspot.com/2011/08/bollywood-kisses.html
KAJAL AGARWAL HOT PICS
http://hotactress-katrina.blogspot.com/2011/09/kajal-agarwal.html

141. Weekly Highlights of Solar and Geomagnetic Activity, 03 - 09 October 2011

Newsgroup: rec.radio.amateur.space
Date: 2011-10-11 21:30:06 UTC
From: SWPC.Webmaster@noaa.gov
Message-ID: <20111011213001.7A84033C94@panix2.panix.com>
Source record: 267
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.info

```
:Product: Weekly Highlights and Forecasts
:Issued: 2011 Oct 11 1854 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
# Weekly Highlights and Forecasts
#
Highlights of Solar and Geomagnetic Activity
03 - 09 October 2011

Solar activity was low. Isolated to occasional C-class flares
occurred on each day of the period. Regions 1302 (N13, L=280,
class/area Fkc/1070 on 28 September), 1305 (N12, L=248, class/area
Chi/250 on 03 October), and 1313 (S15, L=117, class/area Dai/180 on
06 October) were the principal flare producers during the period.
The largest flare of the period was a C9/Sf at 05/1242 UTC from
Region 1313. No earth-directed CMEs were observed during the period.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit reached
high levels during 03 - 05 October. Normal to moderate levels were
observed during 06 - 09 October.

Geomagnetic field activity was at quiet to unsettled levels during
03 - 04 October. Activity increased to quiet to minor storm levels
on 05 October following a geomagnetic sudden impulse at 05/0742 UTC
(19 nT, Boulder USGS magnetometer), with major storm levels observed
at high latitudes, due to multiple CME passages at Earth. Activity
decreased to quiet to unsettled levels during 06 - 08 October. An
increase to quiet to (briefly) active levels occurred on 09 October
associated with a solar sector boundary change.

Forecast of Solar and Geomagnetic Activity
12 October - 07 November 2011

Solar activity is expected to be at very low to low levels during 12
- 17 October, with a slight chance for moderate levels. An increase
to low levels is expected during 18 - 23 October, with a chance for
moderate levels and a slight chance for high levels; due to the
returns of old Regions 1302 and 1305 on 18 October and 20 October,
respectively.
```

No proton events are expected at geosynchronous orbit. There will be a slight chance for a proton event at geosynchronous orbit during 18 - 31 October due to the return of old Region 1302.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at normal to moderate levels during 12 - 27 October. Flux levels are expected to increase to moderate to high levels during 28 October - 01 November in response to coronal hole high-speed stream (CH HSS) effects. Flux levels are expected to decrease to normal to moderate levels during 02 - 07 November.

Geomagnetic field activity is expected to be at quiet levels during most of the period. However, quiet to unsettled levels are expected during 15 - 17 October, 28 - 30 October, and 03 - 05 November due to CH HSS effects.

142. WSR-287 AMSAT Weekly Satellite Report

Newsgroup: rec.radio.amateur.space
Date: 2011-10-15 14:36:13 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <001001cc8b3f$b1a17210$14e45630$@net>
Source record: 268
Cross-posted to: rec.radio.amateur.space,rec.radio.info

```
This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-287.S1
WSR 287 Part 1 10/14/2011

AMSAT NEWS SERVICE BULLETIN 287.S1
FROM AMSAT HQ SILVER SPRING, MD, October 14, 2011
TO ALL RADIO AMATEURS
BID: $WSR-287.S1

ARISSat-1 (Radioskaf-b) (Kedr)
Catalog number: 37772
Launch date: August 03, 2011 1843z
Launch site: International Space Station

Status: Operational

Callsign: RS01S

Current Mode(s):
Linear Transponder: U/v
Uplink: 435.758 to 435.742 MHz CW/LSB
Downlink: 145.922 to 145.938 MHz CW/USB

FM Telemetry/SSTV/Messages/ID:
Downlink: 145.950 MHz FM

Telemetry/Beacon:
Downlink: 145.939 MHz CW1
145.919 MHz CW2
145.920 MHz 1k BPSK USB
145.920 MHz 400b BPSK USB

Official Webpage:http://www.amsat.org/amsat-new/ARISSat/ARISSat.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/informal_detail.php?serialnum=89
[08112011]
=====
SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009 1555z
```

Launch site: Baikonur, Kazakhstan

Status: Recovery

Callsign: ZS0SUM

Uplink: 145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=88
[09292011]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=68
[02092011]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05, 2005 0444z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.9360 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=30

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[02092011]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004 0745z
Launch site: Baikonur, Kazakhstan

Status: Semi-operational - IHU crash each eclipse

Current Mode(s):
Voice repeater: V/u
Uplink: 145.880 MHz FM
Downlink: 435.150 MHz FM

Telemetry: Recovery efforts
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.880 MHz FM
145.920 MHz FM
145.920 MHz FM - 67 Hz PL tone burst
1268.705 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.703 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=19
[06162011]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002 1700z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4
Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the re-
peater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
the 10 minute timer.
[02092011]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993 0140z
Launch site: Kourou, French Guiana

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[02092011]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974
Launch site: Vandenberg AFB, California, USA

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
145.972 MHz CW
435.100 MHz CW
2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02092011]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
Kourou, French Guiana
Uchinoura Space Center, Japan
Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - OFF
APRS - OFF
SSTV - OFF

Expedition 29 Crew (May - September 2011):
Commander: Micheal Fossum KF5AQG
Flight Engineer: Sergey Volkov KE5DAW
Flight Engineer: Satoshi Furukawa
Flight Engineer:
Flight Engineer:
Flight Engineer:

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[09222011]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-287.S2
WSR 287 Part 2 10/14/2011

AMSAT NEWS SERVICE BULLETIN 287.S2
FROM AMSAT HQ SILVER SPRING, MD, October 14, 2011
TO ALL RADIO AMATEURS
BID: $WSR-287.S2

O/OREOS
Catalog Number: 37224

Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.035 MHZ AX.25

Beacon:

Callsign:

URL: http://www.ooreos.org/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=146
[02092011]
=====
Rax-1 Radio Aurora Explorer
Catalog Number: 37223
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.505 MHz 9k6 GMSK

Beacon:

Callsign: RAX-1

URL: http://rax.engin.umich.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=165
[02092011]
=====
FO-69 Fastrac-1 Sara Lily
Catalog Number: 37227
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Operational

Uplink 1: 145.980 MHz 1k2 baud
Uplink 2: 145.825 MHz 1k2 baud
Downlink: 437.345 MHz 1k2 and 8k6 baud

Beacon: 437.435 MHz 1k2 AX.25

Callsign: Fast1

URL: http://fastrac.ae.utexas.edu/index.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=83
[07052011]
=====
FO-70 Fastrac-2 Emma
Catalog Number: 37380
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Operational

Uplink 1: 435.025 MHz 1k2 baud
Uplink 2: 437.435 MHz 9k6 baud
Downlink: 145.825 MHz

Beacon: 145.825 MHz 1k2 AX.25

Callsign: Fast2

URL: http://fastrac.ae.utexas.edu/index.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=84
[07052011]
=====
StudSat
Catalog Number: 36796
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink: 437.505MHz, 9600bps FSK
Downlink: 437.505MHz, 9600bps FSK
Beacon : 437.505MHz, 20bps ASK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=164
[02092011]
=====
TIsat-1
Catalog Number: 36799
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On orbit

Callsign: HB9DE

Uplink: 145.980MHz FM, AFSK
Downlink: 437.305MHz FM, AFSK
Beacon: 437.305MHz CW

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=118

[02092011]
=====
HO-68 HOPE-1 (CAS-1)(XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009 0231z
Launch site: Taiyuan Space Center, PRC

Status: Beacon only

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
145.9250 - 145.9750 MHz SSB/CW
145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
435.7650 - 435.7150 MHz SSB/CW
435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=108

For more information about XW-1 (CAS-1):
http://
[08112011]
=====
SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w): 437.5050MHz FSK 1k2bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=109
[02092011]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
437.3850 MHz FSK 9k6bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=110
[02092011]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=113
[02092011]
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
Beacon(500mw): 436.000MHz GMSK 9k6bp
[02092011]
=====
CP-6
Catalog Number: 35003
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: Operational

Downlink: 437.365 MHz 1k2 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=121
[02092011]
=====
HAWKSAT 1
Catalog number: 35004
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: operational

Downlink: 437.345 MHz ?

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=105
[02092011]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: Operational

Downlink: 437.465 MHz 1k2 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=94
[02092011]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009 0115z
Launch Site: Satish Dhawan Space Centre, India

Status: ?

Downlink: 435.000 MHz
Uplink: 145.800 MHz

Telemetry: 137.400 MHz
[02092011]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon: 437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=101
[02092011]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: In Orbit

Downlink: 437.375 MHZ FSK9k6/CW
Beacon: 437.375 MHz FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[02092011]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
437.465 MHz FM/CW
Beacons: 437.305 MHz FM/CW
437.275 MHz FM/CW

Callsigns: JR5YBN
JR5YBO

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[02092011]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Downlink: 437.455 MHz AFSK/CW
Beacon: 437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[20092011]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493

Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon: 437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[02092011]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008 1520z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Curent Modes: Telemetry
Audio
Images

Downlinks: 435.315 MHz
435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02092011]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web
page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=46
[02092011]

=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=60
[02092011]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational ?

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL
=/satellites/status.php
[07052011]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Current Mode: dependant on last received command

Uplink: 145.980 MHz FM
Downlink: 437.275 Mhz CW
437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[06162011]
=====
CO-66 Seeds II
Catalog number:
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web
page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL
=/satellites/status.php
[02092011]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=72
[02092011]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=74
[02092011]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005 0652z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=37
[02092011]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: ?????

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[02092011]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004 0745z
Launch site: Baikonur, Kazakhstan

Status: Semi-operational - IHU crash each eclipse

Current Mode(s):
Voice repeater: V/u
Uplink: 145.880 MHz FM
Downlink: 435.150 MHz FM

Telemetry: Recovery efforts
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.880 MHz FM
145.920 MHz FM
145.920 MHz FM - 67 Hz PL tone burst
1268.700 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.708 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=19
[06162011]

=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[02252011]
=====
CO-55 Cute-1.7+APD II
Catalog Number: 27844
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Current Mode: CW downlink worldwide
AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=78
[02092011]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001 0240z
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[02092011]
=====
RS-22 RADIO SPORT 22 (MOZHAYETS 4)
Catalog number: 27939
Launch Date: September 27, 2003 0612z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02092011]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990
Launch site: Kourou, French Guiana

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
145.860 MHz 1200-baud Manchester FSK
145.880 MHz 1200-baud Manchester FSK
145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[02092011]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984
Launch site: Vandenburg AFB, California, USA

Status: Operational ?

Current Mode: /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz

Mode-S Beacon: 2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[07052011]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
Kourou, French Guiana
Uchinoura Space Center, Japan
Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - OFF
APRS - OFF
SSTV - OFF

Expedition 29 Crew (May - September 2011):
Commander: Micheal Fossum KF5AQG
Flight Engineer: Sergey Volkov KE5DAW
Flight Engineer: Satoshi Furukawa
Flight Engineer:
Flight Engineer:
Flight Engineer:

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[09222011]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-287.S3
WSR 287 Part 3 10/14/2011

AMSAT NEWS SERVICE BULLETIN 287.S3
FROM AMSAT HQ SILVER SPRING, MD, October 14, 2011
TO ALL RADIO AMATEURS
BID: $WSR-287.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NANOSAIL-D
Catalog Number:
Ejection Date: January 17, 2011

Status: On orbit

Downlink: 437.270 MHz AX.25

URL: http://nanosaild.engr.scu.edu/dashboard.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=115
[01272011]
=====
CP4
Catalog Number: 31132
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=79
[09062010]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=76
[09062010]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=51
[09062010]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.250

Official Website: http://www.ncube.no

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=24
[09062010]

=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink 2401.835 MHz 38k4 packet

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=54
[09062010]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=53
[09062010]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php
[02212009]

=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks: 145.850 MHz
145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B

Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks

V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON General Beacon(GB) Middle Beacon(MB) Engineering Beacon(EB)
2 m none 145.898 MHz none

70cm 435.438 MHz 435.588 MHz 435.838 MHz
13cm(1) 2400.188 MHz 2400.338 MHz 2400.588 MHz
13cm(2) 2401.173 MHz 2401.323 MHz 2401.573 MHz
3cm 10450.975 MHz 10451.125 MHz 10451.375 MHz
1.5cm 24047.885 MHz 24048.035 MHz 24048.285 MHz
[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT

Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
145.890 FM
145.930 FM
1269.700 FM
1269.800 FM
1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[07172010]
=====

TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink: 435.1380 MHz AFSK 1200 BPS
Downlink: 435.2060 MHz AFSK 1200 BPS
Uplink: 145.8150 MHz AFSK 1200 BPS
Uplink: 145.8350 MHz AFSK 1200 BPS
Uplink: 145.8550 MHz AFSK 1200 BPS
Uplink: 145.8750 MHz AFSK 1200 BPS
[06042009]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
145.870 MHz FM
145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[10142011]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks: 145.875 MHz FM 1200-baud
145.900 MHz FM 1200-baud
145.925 MHz FM 1200-baud
145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink: 435.0625 MHz FM 1k2bps AFSK
435.1125 MHz FM 1k2bps AFSK
435.1375 MHz FM 1k2bps AFSK
Downlink: 145.9750 MHz FM 1k2bps AFSK
2446.5025 MHz FM 1k2bps AFSK

Beacon: 2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087

Launch Date: January 29, 1991

Status: Non-Operational

Uplink: 435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons: 435.795 MHz CW
435.910 MHz AX25

Voice Transponder:
Uplink: 145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks: 145.850 MHz
145.870 MHz
145.890 MHz
145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode: V/u

Uplink: 145.900 MHz FM 1200-baud Manchester FSK (reserved)
145.920 MHz FM VOICE
145.940 MHz FM 1200-baud Manchester FSK (reserved)
145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink: 437.026 MHz USB VOICE
(1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink: 145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink: 145.8500 MHz MFSK 1200 BPS
Uplink: 145.8700 MHz MFSK 1200 BPS
Uplink: 145.8900 MHz MFSK 1200 BPS
Uplink: 145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.8500 - 145.9000 MHz SSB/CW
Downlink 29.4000 - 29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink: 29.4500 - 29.5500 MHz SSB/CW

Beacons: 29.450 MHz
435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink: 145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB

Beacon 1: 29.352 MHz (intermittent)
Beacon 2: 29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12

Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-287.S4
WSR 287 Part 4 10/14/2011

AMSAT NEWS SERVICE BULLETIN 287.S4
FROM AMSAT HQ SILVER SPRING, MD, October 14, 2011
TO ALL RADIO AMATEURS
BID: $WSR-287.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Re-entered
Re-entered: October 25, 2009

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=56
[09062010]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 437.325 MHz 9k6 GMSK
437.325 MHz CW 20wpm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=117
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 436.250 MHz 9k6 FHSS
[11112009]
=====
Pollux
Catalog Number: 35693
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=139
[09062010]
=====
Castor (ANDE-2)
Catalog Number: 35694
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=144
[09062010]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=59
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Re-Entered
Re-entered date: August 8, 2010

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[08082010]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at} amsat.org
NNNN
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143. ANS-289 AMSAT News Service Weekly Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2011-10-16 01:06:05 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <000401cc8b9f$c223d190$466b74b0$@net>
Source record: 269
Cross-posted to: rec.radio.amateur.space,rec.radio.info

AMSAT NEWS SERVICE
ANS-289

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* It's Time to Finalize Your Symposium Reservations
* Tentative Schedule of Symposium Events
* SSTL Celebrates 30th Anniversary of UoSAT-1
* IARU Spectrum Futures Committee Addresses Amateur Satellite Allocations
* Amateur Satellites Featured in Astronautical Congress Meeting
* AubieSat-1 Vandenberg Launch Rescheduled to October 27
* Successful Launch for JUNGU and SRMSat From India
* NASA Announces Two Contests For Students
* Satellite Shorts From All Over

SB SAT @ AMSAT $ANS-289.01
It's Time to Finalize Your Symposium Reservations

AMSAT News Service Bulletin 289.01
>From AMSAT HQ SILVER SPRING, MD.
October 16, 2011
To All RADIO AMATEURS
BID: $ANS-289.01

AMSAT's 2011 Space Symposium is quickly approaching. It will be held on Friday, November 4th through Sunday, November 6th in San Jose, CA.

This year commemorates the 50th anniversary of the launch of OSCAR 1. Many events are planned to celebrate our 50 years of keeping amateur radio in space. The original OSCAR 1 prototype has been refurbished by the ARRL Lab. It will be on display and transmitting. Our Banquet Speaker is Lance Ginner, K6GSJ who was on the OSCAR 1 development team.

Our annual gathering will also feature:

+ Space Symposium with Amateur Satellite Presentations
+ Operating Techniques, News, & Plans from the Amateur Satellite World
+ Board of Directors Meeting open to AMSAT members (Nov. 3-4)
+ Meet Board Members and Officers
+ Annual General Membership Meeting
+ Annual Banquet-Keynote Speaker and Door Prizes

The 2011 Symposium hotel and registration web pages are now available on the AMSAT web site. You may register for the Symposium and Annual Banquet at the AMSAT Store:
http://www.amsat-na.com/store/SymposiumReg.php

Visit the Symposium and Annual General Meeting web page for details and the latest information:
http://www.amsat.org/amsat-new/symposium/2011/index.php

Symposium Registration including a copy of the Proceedings is:
+ $50 per person starting September 20, 2011
+ $55 per person at the door

The Saturday evening banquet is $45 per person. The Sunday morning Area Coordinator's Breakfast is $15 per person.

The hotel selected is the Wyndham San Jose, close to the airport. The AMSAT discount rate is $79.00+taxes per night. The reservation block code when calling the hotel directly is "AMSAT". The hotel telephone number is 408-453-6200. If you are making reservations on-line use 1031FSJAM for the group code. The direct link to the hotel web page is: http://www.wyndham.com/hotels/SJCAP/main.wnt

The cutoff date for the special AMSAT group rate at the Wyndham Hotel for room reservations to October 24.

If you are planning to book a room on dates other than November 2, 3, 4, 5, you will have to call the hotel directly and ask for *in-house reservations*. You can get the $79 rate 3 days before and 3 days after the above dates but you cannot book the room on their website. Any problems, give Martha a call at the AMSAT Office: 301-589-6062.

[ANS thanks the 2011 Symposium Committee for the above information]

/EX

SB SAT @ AMSAT $ANS-289.02
Tentative Schedule of Symposium Events

AMSAT News Service Bulletin 289.02
>From AMSAT HQ SILVER SPRING, MD.
October 16, 2011
To All RADIO AMATEURS
BID: $ANS-289.02

Thursday, November 3

AMSAT Board of Directors Meeting open to all AMSAT members

Friday, November 4

Symposium Registration Desk Open
AMSAT Board of Directors Meeting (Friday morning)
1300 - 1700 Symposium Opening and Technical Presentations

Saturday, November 5

0730 Symposium Registration Desk Open
0800 - 1200 Technical Presentations
1200 - 1300 Lunch Break on your own
1300 - 1530 Technical Presentations
1530 - 1700 Annual General Meeting
1700 - 1800 Break
1800 - 1900 Attitude Adjustment with Cash Bar
1900 - 2100 Banquet and Keynote Speaker and Door Prize Drawing

Sunday, November 6

0730 Area Coordinators Field Ops Breakfast
0945 Meet for Sunday Tour Tech Museum of Innovation in San Jose.
See the latest Tour information at:
http://www.amsat.org/amsat-new/symposium/2011/SymposiumSchedule.php

[ANS thanks the 2011 Symposium Committee for the above information]

/EX

SB SAT @ AMSAT $ANS-289.03
SSTL Celebrates 30th Anniversary of UoSAT-1

AMSAT News Service Bulletin 289.03
>From AMSAT HQ SILVER SPRING, MD.
October 16, 2011
To All RADIO AMATEURS
BID: $ANS-289.03

Surrey Satellite Technology Limited (SSTL) celebrated the 30th
anniversary of the launch of Surrey's first satellite, UoSAT-1.
Launched into orbit on 6th October 1981, UoSAT-1 was designed
and built by a team from the University of Surrey led by SSTL
founder Sir Martin Sweeting, G3YJO.

UoSAT-1 was also known as UoSAT-OSCAR 9. It was a scientific and
educational low-Earth orbit satellite containing many experiments
and beacons but no amateur transponders. UO-9 was fully operational
until it re-entered October 13, 1989 from a decaying orbit after
nine years of service.

UO-9's mission scored several firsts for technology which would be
incorporated into future amateur satllite missions including:

+ The first on-board computer (IHU - Integrated Housekeeping Unit)
+ Battery and attitude management
+ Remote control, and experiments
+ First S-band beacon
+ It carried a CCD camera, a Digitalker speech synthesizer, and transmitted telemetry data on a 145.826 MHz beacon at 1200 baud using asynchronous AFSK.

Amateur Satellite Operators are also familiar with later SSTL UO-Sat developments:

+ UoSAT-2 was designated as UO-11 which can still be heard operating on 145.825 MHz with a beacon transmitting 1200 baud using asynchronous

AFSK.

+ UoSAT-3 was designated as UO-14 (no longer operational) and featured an FM Voice Repeater with 145.9750 MHz uplink and 435.0700 MHz down-link.

More history can be found in an interesting article posted on the SpaceDaily.com website: http://tinyurl.com/3urdd9o

Read the SSTL Press Release at:
http://www.sstl.co.uk/news-and-events?story99

[ANS thanks SSTL for the above information]

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SB SAT @ AMSAT $ANS-289.04
IARU Spectrum Futures Committee Addresses Amateur Satellite Allocations

AMSAT News Service Bulletin 289.04
>From AMSAT HQ SILVER SPRING, MD.
October 16, 2011
To All RADIO AMATEURS
BID: $ANS-289.04

The September, 2011 ARRL Spectrum Defense Matters newletter discusses the formation of the IARU Spectrum Futures Committee to develop strategies for retaining access to bands above 148 MHz for the amateur and amateur-satellite services globally.

There are no Global Primary Amateur and Amateur Satellite Service allocations between 146 MHz and 24 GHz. Access to spectrum suitable for weak signal work in the 146-3500 MHz region is crucial for the Amateur Satellite Service.

Read the ARRL Spectrum Defense Matters newletter (PDF) on-line at:
http://tinyurl.com/5sre5pv (arrl.org)

[ANS thanks the ARRL for the above information]

/EX

SB SAT @ AMSAT $ANS-289.05
Amateur Satellites Featured in Astronautical Congress Meeting

AMSAT News Service Bulletin 289.05
>From AMSAT HQ SILVER SPRING, MD.
October 16, 2011
To All RADIO AMATEURS
BID: $ANS-289.05

The 62nd International Astronautical Congress held in Cape Town, South Africa featured amateur radio satellites in various sessions.

The data collected by SumbandilaSat, S0-67, provides useful information for selecting future ground station locations for minimum interference. The study by Dr Jakobus van Zyl and Johann Lochner, ZE6CBC, both engineers at SunSpace, covered a global geographical survey of received signal's strength in the VHF band. This data will give an indication of frequencies to use for command and telemetry communication at existing ground stations.

The Cape Peninsular University of Technology unveiled it's first CubeSat during the conference. This satellite will include a beacon operating in the 20 meter amateur band on 14.099 MHz. The main mission will be to support the Hermanus Magnetic Observatory science payload for operations in Antarctica. The downlink will be used for optimising the SuperDarn HF radar system operated by the National Space Agency. It is also expected to provideinteresting antenna characterization opportunities for radio amateurs. No launch date has been set at present.

More information can be found on the South Africa AMSAT web page:
http://www.amsatsa.org.za/

An article written by Hans van de Groenendaal, ZS6AKV, about the new HF CubeSat mission can be read at: http://tinyurl.com/68hzgou

[ANS thanks SARL and SA-AMSAT for the above information]

/EX

SB SAT @ AMSAT $ANS-289.06
AubieSat-1 Vandenberg Launch Rescheduled to October 27

AMSAT News Service Bulletin 289.06
>From AMSAT HQ SILVER SPRING, MD.
October 16, 2011
To All RADIO AMATEURS
BID: $ANS-289.06

The launch of Auburn University's AubieSat-1 satellite has been rescheduled to October 27, 2011 due to problems found during the system integration of the primary mission. A hydraulic system leak was detected and the cause was found to be a small crack in a hydraulic tube. A replacement tube was manufactured, installed, and retested. Also, a flexible fabric collar connecting two engine system exhaust ducts was

found to be damaged following pressurized leak testing. The damaged fabric collar is being removed and replaced.

AubieSat-1 is designed to transmit with a power of about 800 milli-watts on a frequency of 437.475 MHz, plus or minus Doppler correction. The beacon signal, along with telemetry, will be sent using A1A continuous wave Morse code at 20 words per minute. Additional telemetry from the on board science experiment will use CW transmissions up to 60 WPM.

An internet Echolink conference group is also planned to begin one-half hour prior to launch and continue until about 30 minutes after confirmation of the first receipt of signals from the satellite. Information on the conference groups title will be distributed nearer to the launch for interested stations.

Long-time AMSAT Member John Klingelhoeffer, WB4LNM serves as the Technical Advisor in Auburn University's Student Space Program.

[ANS thanks Dominic Hildebrandt at Auburn University for the above information].

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SB SAT @ AMSAT $ANS-289.07
Successful Launch for JUNGU and SRMSat From India

AMSAT News Service Bulletin 289.07
>From AMSAT HQ SILVER SPRING, MD.
October 16, 2011
To All RADIO AMATEURS
BID: $ANS-289.07

University satellites 'Jugnu' and 'SRMSat' using amateur frequencies were successfully launched by PSLV C-18 from Satish Dhawan Space Centre Shriharikota, India on October 12.

The Jugnu team is requesting CW Beacon signal Reports along with the plain decoded morse message. The Jugnu reports can be sent to the following mail IDs:
wmy@isac.gov.in
shantag@iitk.ac.in

After launch the JUNGU beacon was first received by Shamai 4Z1WS from Israel. The decoded CW text message by indicated the nominal performance of the spacecraft.

Jugnu Frequency: CW Beacon - 437.275 MHz (17dbm)

After launch the SRMSat beacon was first received in New Zealand by Ian Ashley, ZL1AOX who reported weak but copyable signals.

The SRMSat reports can be sent to:
sanjaynekkanti@gmail.com

kc2yqj@arrl.org

SRMSAT Frequency: CW Beacon - 437.425 MHz (10dbm)
SRMSat Keps file: http://dinesh.cyanam.net/dl/SRMSAT_TLEs.txt

The CW Telemetry and decoding details for SRMSAT are as below:
Character 6: Satellite Mode
1. P - Sensing Mode
2. X - Communication Mode
3. C - Normal Mode
4. Z - Detumbling Mode

Character 7: Magnetometer Status
1. C - On
2. P - Off
3. X - Error
4. Z - Ready

Character 8: GPS Status

Character 9: Payload Status

Character 10: Temperature Status
1. C - < 0 degree celcius
2. P - 0 to 10 degree celcius
3. X - 10 to 20 degree celcius
4. Z - 20 to 30 degree celcius
5. 6 - 30 to 40 degrees celcius
6. 4 - Above 40 degrees celcius

Character 11: Battery Status
1. C - Less than 7 V
2. P - >7V and <7.3V
3. X - >7.3V and <7.6V
4. Z - >7.6V and <7.9V
5. 6 - >7.9V and <8.1V
6. 4 - >8.1V

[ANS thanks Dinesh Cyanam, KC2YQJ, and Mani, VU2WMY for the above information]

/EX

SB SAT @ AMSAT $ANS-289.08
NASA Announces Two Contests For Students

AMSAT News Service Bulletin 289.08
>From AMSAT HQ SILVER SPRING, MD.
October 16, 2011
To All RADIO AMATEURS
BID: $ANS-289.08

GRAIL Spacecraft Naming Contest

The Gravity Recovery And Interior Laboratory mission to the moon, also known as GRAIL uses two twin spacecraft orbiting the moon at very precise distances to create a gravity map of the moon. Accurate knowledge of the moon's gravity could also be used to help choose future landing sites on the moon.

Now that they're on their way to the moon, the two robotic spacecraft, currently dubbed GRAIL-A and GRAIL-B, need real names, ones that capture the spirit and excitement of lunar exploration. And NASA is looking for students to help with the naming duties.

U. S. students in grades K-12 are eligible. Entries should include the chosen names for the spacecraft, along with an explanation of why those names should be selected. Justification can be any length, from a short paragraph to a 500-word essay.

Entries are due Nov. 11, 2011. All entries must be submitted by teachers. For more information about the GRAIL mission and to submit entries via the online entry form visit: http://solarsystem.nasa.gov/grail/namingcontest.cfm.

If you have questions about the GRAIL Naming Contest, please email: grailcontest@jpl.nasa.gov.

Your Experiment, What Will You Do Contest

NASA has created a contest for kids from anywhere on the planet to have their idea for a science experiment performed by astronauts on the International Space Station, with it live-streamed back to Earth.

YouTube SpaceLab is an open competition inviting 14 – 18 year olds to come up with an idea for a science experiment for space. You don't have to actually do the experiment, you just have to make a 2-minute video of yourself explaining it.

The tagline for this contest is "Your experiment, 250 miles above the Earth, for the whole world to see," and this should be a really fun and engaging world-wide contest that is sure to generate a lot of interest. Students in two age categories, 14-16 years old and 17-18 years old, either alone or in groups of up to three, may submit a YouTube video describing their experiment to: http://YouTube.com/SpaceLab. More information about the contest is available at this link, too.

Deadline is Dec. 7. The panel of judges is a veritable Who's Who of space mover and shakers, including Dr. Stephen Hawking, Bertrand Piccard, Professor Colin Pillinger, Peter Diamandis, Guy Laliberté, Richard Garriott, astronauts Leland Melvin, Chris Hadfield, and Bill Gerstenmaier from NASA.

There are some other great prizes, too. Six regional finalists will gather in Washington, D.C., in March 2012 to experience a ZERO-G flight and receive other prizes. From them, two global winners, one

from each age group, will be announced and later have their experiments performed 250 miles above Earth and live streamed on YouTube. Additionally, the global winners will get to choose a unique space experience as a prize: either a trip to Tanegashima Island, Japan, to watch their experiment blast off in a rocket bound for the ISS, or once they are 18 years old, a one-of-a-kind astronaut training experience in Star City, Russia, the training center for Russian cosmonauts.

The remaining four regional winners will also receive a trip to the U.S., a ZERO-G flight, and a Lenovo IdeaPad laptop. The contest is sponsored by YouTube and Lenovo, in cooperation with Space Adventures and space agencies NASA, ESA, and JAXA.

More details can be found on-line in these videos:
http://www.youtube.com/SpaceLab
http://www.youtube.com/watch?feature&#65533;ayer_embedded&v&#65533;9k63Be35c

[ANS thanks the NASA Education Express Message for the above information]

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SB SAT @ AMSAT $ANS-289.09
Satellite Shorts From All Over

AMSAT News Service Bulletin 289.09
>From AMSAT HQ SILVER SPRING, MD.
October 16, 2011
To All RADIO AMATEURS
BID: $ANS-289.09

+ Congratulations are in order for John, K8YSE upon reaching the 1000th grid worked via satellite.

+ Tom, W9KE has written a program which looks for satellite passes where communications between two different grid locations is possible. Tom invites interested testers to download the program from http://www.tomdoyle.org/simplesat/simplesat.html It is a zip file. Un-Zip the files into a folder and run the SimpleSat.exe file. No install is required and the three files it will create are stored in the same folder as the SimpleSat.exe program. It does nothing to the registry. It downloads sat data from the net so use a computer connected to the net when you run the program. Contact Tom directly at tomdoyle1948@gmail.com with any questions or comments.

+ An interesting umbrella shaped antenna was successfully deployed this week from the new Navy experimental TacSat 4 communications satellite launched on-board a Minotaur rocket on September 27 from the Alaska Kodiak launch complex. A photo of the experimental antenna and a video of the launch can be viewed at:
http://spaceflightnow.com/minotaur/tacsat4/111008update/

+ Zac Manchester, a graduate student in Aerospace Engineering at Cornell University developed, fingernail-sized satellites which may be deployed for earth-orbit missions and could someday travel to Saturn. As they flutter down through its atmosphere, they will collect data about chemistry, radiation and particle impacts. Each Sprite contains a 10mw transmitter. KickSat is a CubeSat designed to carry hundreds or even thousands of Sprites into space and deploy them in low Earth orbit. Donors who sponsor a sprite will get to name it and specify the text that it will transmit on a frequency between 433 and 436 MHz. A group or club can also sponsor a fleet of Sprites together. Full details can be found at: http://www.kicksat.org (Kickstarter.com)

+ SA AMSAT has issued the first call for papers for the 2012 Space Symposium to be held in Durban on Saturday 12 May 2012, at the University of KwaZulu-Natal. If you would like to present a paper, please send a brief synopsis to reach SA AMSAT by no later than 31 January 2012. The theme will be 50 years of OSCAR, celebrating the launch of the first amateur radio satellite on 12 December 1961.

+ During Opportunity rover's three-year trek across 20 km (13 miles) of Meridiani Planum on Mars, rover planners captured a horizon photograph at the end of each drive using the unique vantage point of the rover itself. 309 images taken during the journey appear in this video. A sound track was generated using the rover's accelero-meter data - rough sounds are rocky terrain, and traversing sandy terrain is quieter. Take your ride across Mars at: http://tinyurl.com/666b9gy (UniverseToday.com)

+ Watch a video of the flight of the custom-built 26 ft. Qu8k (pro-nounced "Quake") rocket on September 30, 2011 from the Black Rock Desert in Nevada. It reached an altitude of 121,000 feet (36,880 meter) in 92 seconds, at speeds of 2,185 mph: http://tinyurl.com/3stmloo (UniverseToday.com)

+ If you read an interesting scientfic paper discussing how our Earth would appear to other solar systems searching for exo-planets you'll be able to steer the the conversation to some-thing more interesting than the state of the other fellow's gallbladder on 75 meters. Bone up at: http://arxiv.org/PS_cache/arxiv/pdf/1110/1110.1340v1.pdf

[ANS thanks everyone for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive addi-tional benefits. Application forms are available from the AMSAT Office. And with that, please keep in mind, "That's the third electric shock I've gotten today!" Tom said, revoltedly. That was an old joke but he didn't know any current puns. He didn't know

watt made him say that. At which point, he'd have to send that telegram again, Tom said, remorsefully. Then he was out of here, walking home after deciding he wouldn't let a flat tire get him down, Tom said without despair ... makes you wonder wire we continuing?

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

144. Weekly Highlights of Solar and Geomagnetic Activity, 10 - 16 October 2011

Newsgroup: rec.radio.amateur.space
Date: 2011-10-18 21:30:06 UTC
From: SWPC.Webmaster@noaa.gov
Message-ID: <20111018213002.3BEEF33C8E@panix2.panix.com>
Source record: 270
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.info

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:Product: Weekly Highlights and Forecasts
:Issued: 2011 Oct 18 1802 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
# Weekly Highlights and Forecasts
#
Highlights of Solar and Geomagnetic Activity
10 - 16 October 2011

Solar activity was low. Activity for the period consisted of
numerous C-class flares. The primary contributors were Region 1319
(N11, L=051, class/area Eki/280 on 16 October) and 1314 (N25, L=056,
class/area Cho/370 on 12 October). The background solar flux levels
and sunspot numbers stayed elevated throughout the week due to the
number of active regions on the disk, but most of these were stable
and were not flare productive.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at
background levels throughout the period.

The geomagnetic field was mostly quiet during the week. A brief
substorm interval was observed at high latitudes early on 12
October. There was a modest increase to quiet to unsettled levels
with some isolated active periods at high latitudes on 15-16
October. Solar wind observations from the ACE spacecraft indicated
an increase in solar wind velocity on 15-16 October which had
signatures consistent with a coronal hole driven high speed solar
wind stream.

Forecast of Solar and Geomagnetic Activity
19 October - 14 November 2011

Solar activity is expected to be predominantly low with a chance for
an isolated M-class event for 19 October - 01 November due to the
number of active regions as well as the return of old Region 1302
(N12, L=280, class/area Fkc/1300 on 24 September), which produced
two X-class flares and numerious M-class flares during its previous
disk transit. Though initially very active, old Region 1302 decayed
and became much less flare productive by the time it exited the
solar disk on 05 October. As of the issue date of this report (18
October) old Region 1302 was just beginning to rotate onto the solar
```

disk and appears to be a likely source for occasional C-class flares and may pose a slight threat for M-class flares. Solar activity is expected to decline to very low to low levels for the remainder of the interval from 02-14 November. As always during this time of the cycle there is also a chance for unexpected flux emergence which could elevate solar activity levels.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at background levels for most of the outlook interval with the exception of 28 October - 01 November when an increase to high levels is expected due to recurrence.

Geomagnetic field activity is expected to be quiet for 19-27 October, generally unsettled for 28-30 October, quiet for 31 October - 02 November, unsettled for 03-05 November, quiet for 06-10 November, unsettled for 11-13 November, and quiet for 14 November. The increases to unsettled levels are expected due to recurrence from coronal hole driven high speed solar wind streams.

145. Weekly Highlights of Solar and Geomagnetic Activity, 17 - 23 October 2011

Newsgroup: rec.radio.amateur.space
Date: 2011-10-25 21:30:06 UTC
From: SWPC.Webmaster@noaa.gov
Message-ID: <20111025213001.1D89D33C8E@panix2.panix.com>
Source record: 271
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.info

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:Product: Weekly Highlights and Forecasts
:Issued: 2011 Oct 25 1916 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
# Weekly Highlights and Forecasts
#
Highlights of Solar and Geomagnetic Activity
17 - 23 October 2011

Solar activity was low to moderate. Early in the period, solar
activity was at low levels with a majority of the C-class activity
from Regions 1319 (N=10, L=051, class/area Eki/420 on 17 October)
and 1324 (N11, L=305, class/area Ekc/360 on 20 October). Low level
C-class activity was observed until early on 20 October when an M1
x-ray event occurred at 20/0325Z from an area on the west limb. This
event most likely originated from Region 1318 (N20, L=096,
class/area Dso/50 on 13 October). M-class activity continued during
21 and 22 October with an M1 x-ray event at 21/1300Z from Region
1319 and a M1/Sf long duration flare at 22/1110Z from Region 1314
(N25, L=058, class/area Cho/370 on 12 October). The 21 October
M-flare had associated Type II (789 km/s) and Type IV radio sweeps,
but no Earth-directed CME was detected. The 22 October M-flare had
an associated CME with a mostly northward directed component with an
approximate plane-of-sky speed of 600 km/s measured in STEREO A
COR2. LASCO C2 and C3 imagery observed a partial halo CME with a
maximum plane-of-sky speed of 1000 km/s in its northernmost edge. A
large filament eruption was also observed in SDO/AIA imagery in the
Northwest quadrant of the solar disk starting at 22/0058Z. An
associated CME was observed with a slight Earth-directed component
with an approximate speed of 500 km/s. Activity returned to low
levels on the last day of the period.

The greater than 100 MeV proton flux at geosynchronous orbit
remained below threshold levels the entire period. A greater than 10
MeV proton event began at 23/1500Z in response to the M1/Sf
long-duration flare observed midday on 22 October. The event peaked
at 13pfu at 23/1535Z and ended at 23/1605Z.

The greater than 2 MeV electron flux at geosynchronous orbit was at
normal levels the entire period.
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The geomagnetic field was mostly quiet during the summary period. On the last day of the summary period, a weak shock passage was observed in the ACE solar wind data at 23/2320Z, but the geomagnetic field remained quiet. A glancing blow from a CME associated with an M1 x-ray event observed near the NW limb at 20/0325Z was the suspected source of the shock.

Forecast of Solar and Geomagnetic Activity
26 October - 21 November 2011

Solar activity is expected to be at predominantly low levels during the forecast period. There will be a slight chance for M-class activity during 26 October - 03 November. M-class activity increases from a slight chance to a chance during 04 - 17 November, with a slight chance for X-class activity from 04 - 17 November, due to the return of old active Regions 1314 (N29, L=056) and 1319 (N12, L=052).

No proton events are expected at geosynchronous orbit during the forecast period.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at normal to moderate levels during 26 - 29 October, with an increase to moderate to high levels during 30 October - 01 November. Mostly normal levels are expected during 02 - 21 November.

Quiet to active levels are forecast for 26 October as effects from the 22 October CME arrival subside. The field is expected to return to mostly quiet levels by 27 October. Quiet to unsettled levels are expected during 28 - 29 October as a coronal hole high-speed stream (CH HSS) disturbs the field. A return to mostly quiet levels is expected during 31 October - 02 November. From 03 - 05 November, quiet to unsettled levels are expected as another recurrent CH HSS affects the field. Mostly quiet levels are expected during 06 - 21 November.

146. ANS-296 AMSAT News Service Weekly Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2011-10-26 14:46:13 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <001901cc93ed$fc506080$f4f12180$@net>
Source record: 272
Cross-posted to: rec.radio.amateur.space,rec.radio.info

AMSAT NEWS SERVICE
ANS-296

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* AMSAT Symposium Weekend Quickly Approaching
* FO-29 Eclipse Undervoltage Stops Operation
* 4C1JPG Satellite Operation From 2011 Pan-American Games
* FP DXpedition Plans Satellite Operation
* AubieSat-1 Launch Includes Four Additional Satellites
* Prospero to be reactivated on 137.560 MHz
* SatPC32 Version 12.8b Available
* ARISS Status - 17 October 2011

SB SAT @ AMSAT $ANS-296.01
AMSAT Symposium Weekend Quickly Approaching

AMSAT News Service Bulletin 296.01
From AMSAT HQ SILVER SPRING, MD.
October 23, 2011
To All RADIO AMATEURS
BID: $ANS-296.01

Time is quickly approaching for the upcoming AMSAT Symposium to be held November 4-6. This year's Symposium marks the 50th anniversary of the launch of the first amateur radio satellite into space. The Symposium is being held in San Jose, CA which is the home of Project OSCAR, the organization that built amateur radio's first satellite. As part of our commemoration, the ARRL is bringing an OSCAR 1 proto-type which has been refurbished to help highlight this significant milestone. Our banquet speaker, Lance Ginner, K6GSJ was a member of the team that built OSCAR 1; he subsequently was involved with a number of follow-on amateur radio satellite projects. Lance's pre-sentation promises to be a fascinating look at the early days of amateur radio in space as well as perhaps some lessons learned.

Along with recognizing this significant milestone, the Symposium is an excellent opportunity to learn about the success of ARISSat-1 as well as AMSAT's latest project, Fox and the steps that we're taking to continue to keep amateur radio in space. There are some excellent presentations scheduled that will cover the gamut from satellite engineering to satellite operations to education outreach.
This year's "Proceedings of the AMSAT-NA Space Symposium and Annual Meeting", which is provided to every Symposium attendee contains 21 papers and is over 250 pages in length. While not all papers will be presented, there are also several presentations scheduled to be presented where the material was not finished in time for publication.

Along with the outstanding materials presented, Symposium offers a great opportunity to meet the AMSAT leadership (the Board of Directors members as well as Senior Officers), other satellite enthusiasts, and interact with our volunteers who are involved with our engineering projects. Symposium is both a presentation/educational opportunity as well as a social event.

If you haven't yet registered for this year's Symposium, please consider joining us. Details on the Symposium and registering can be found at: http://www.amsat.org/amsat-new/symposium/2011/index.php

Please note that deadline for taking advantage of the block or rooms that AMSAT has reserved expires on October 24, so time is indeed running out for making your arrangements. The last time that AMSAT held a Symposium in California was in 2006; this may be the best chance for AMSAT members and others living on the West Coast to participate in a Symposium and have direct interaction with the AMSAT leadership for some time. Hopefully, those of you living in the Bay Area will take full advantage of this opportunity. Alan Bowker, WA6DNR and his team have done a great job preparing for an outstanding weekend in San Jose.

See ya in San Jose!

Barry Baines, WD4ASW
President-AMSAT

[ANS thanks Barry, WD4ASW, for the above information]

/EX

SB SAT @ AMSAT $ANS-296.02
FO-29 Eclipse Undervoltage Stops Operation

AMSAT News Service Bulletin 296.02
From AMSAT HQ SILVER SPRING, MD.
October 23, 2011
To All RADIO AMATEURS
BID: $ANS-296.02

Information has been received that the FO-29 analog repeater is currently off the air. The eclipse periods have increased to the

point exceeding 27% shadowing which causes an undervoltage fault
to shut down the satellite.

The FO-29 control station sent commands to reactivate the satellite
during daytime passes over Japan between October 8-10. Also at the
present time the control station was experiencing computer hardware
problems which slowed progress.

[ANS thanks Mineo, JE9PEL, for the above information]

/EX

SB SAT @ AMSAT $ANS-296.03
4C1JPG Satellite Operation From 2011 Pan-American Games

AMSAT News Service Bulletin 296.03
From AMSAT HQ SILVER SPRING, MD.
October 23, 2011
To All RADIO AMATEURS
BID: $ANS-296.03

Members of the "Radio Experimentadores de Occidente" radio club
XE1TD will use the special Mexican call 4C1JPG during the 2011
Pan-American Games, currently taking place in Guadalajara. 4C1JPG
("Juegos Panamericanos Guadalajara", the Spanish translation of
the event in that Mexican city) will be on 160m through 6m, as
well as the satelltes through 30 October 2011.

QSL cards will be available, as well as electronic confirmations in
both LOTW and eQSL. More information about 4C1JPG, including the
Mexican address of the 4C1JPG QSL manager, is available at:

http://www.qrz.com/db/4C1JPG

QSL via LoTW, by the Bureau or direct to XE1GZU: Luis Zepeda
Hernandez, P.O. Box 5-273, Guadalajara, Jalisco 45042, Mexico.

[ANS thanks Ohio/Penn DX Bulletin #1032 for the above information]

/EX

SB SAT @ AMSAT $ANS-296.04
FP DXpedition Plans Satellite Operation

AMSAT News Service Bulletin 296.04
From AMSAT HQ SILVER SPRING, MD.
October 23, 2011
To All RADIO AMATEURS
BID: $ANS-296.04

FP - Eric, KV1J and Jack, KV1E will be active as FP/KV1J and FP/KV1E
from Miquelon Island (NA-032) from 25 October to 1 November. Plans
are to operate SSB and RTTY, with some CW and PSK31, on 160-10 meters,
plus 6m "if indications of openings". FP/KV1J will take part in the
CQ WW DX SSB Contest (SOAB HP). QSL via home calls,direct or bureau,

and LoTW, Information on satellite activity and and other details can be found at www.kv1j.com/fp/october11.html for AO-51 (if available), AO-27, SO-50, SO-67, and HO-68. All FM mode, V/U.

ANS thanks 425 DX NEWS DX Newsletter for the above information]

/EX

SB SAT @ AMSAT $ANS-296.05
AubieSat-1 Launch Includes Four Additional Satellites

AMSAT News Service Bulletin 296.05
From AMSAT HQ SILVER SPRING, MD.
October 23, 2011
To All RADIO AMATEURS
BID: $ANS-296.05

The launch of Auburn University's AubieSat-1 satellite has been re-scheduled to 28 October 2011 due to problems found during the system integration of the primary mission. A hydraulic system leak was detected and the cause was found to be a small crack in a hydraulic tube. A replacement tube was manufactured, installed, and retested. Also, a flexible fabric collar connecting two engine system exhaust ducts was found to be damaged following pressurized leak testing. The damaged fabric collar is being removed and replaced.

EXPENDABLE LAUNCH VEHICLE STATUS
Spacecraft: NPP (NPOESS Preparatory Project)
Launch Vehicle: Delta II 7920
Launch Site: Vandenberg Air Force Base, Calif.
Launch Date: Oct. 28, 2011
Launch Window: 2:48:01 a.m. - 2:57:11 a.m. PDT (9 min., 10 sec.)
Orbital Altitude: 512 miles
Note: This is the launch vehicle for AubieSat-1 and 4 other microsatellites

Satellite: AubieSat-1
Downlink Freq: 437.475 MHz
EIRP: .708W
Modulation Scheme: Interrupted Continuous Wave (IWC)
Protocol: Morse Code
Baud Rate: 20wpm

Satellite: DICE
Downlink Freq: 465 MHz
EIRP: -4.51dBW
Modulation Scheme: OQPSK
Protocol: CCSDS
Baud Rate: Modulation data rate 1.5 megabit,
Actual Tx bit rate 3.0 megabit

Satellite: RAX-2
Downlink Freq: 437.345 MHz

Modulation Scheme: GMSK
Baud Rate: 9600

Satellite: M-Cubed (1)
Downlink Freq: 437.485MHz
EIRP: < 1W
Modulation Scheme: FSK
Protocol: AX.25
Baud Rate: 9600

Satellite: Explorer-1[PRIME] Flight Unit 2
Downlink Freq: 437.505 MHz
EIRP: -0.7dBW
Modulation Scheme: Non-Coherent FSK
Protocol: KISS Custom
Baud Rate: 1200

Additional spacecraft information can be found on the satellite
websites listed below:
M-Cubed:
http://umcubed.org/
DICE:
http://www.sdl.usu.edu/programs/dice
Explorer-1[PRIME]
http://ssel.montana.edu/e1p/
RAX-2:
http://rax.engin.umich.edu/
AubieSat-1:
http://space.auburn.edu/

AubieSat-1 is designed to transmit with a power of about 800 milli-
watts on a frequency of 437.475 MHz, plus or minus Doppler correc-
tion. The beacon signal, along with telemetry, will be sent using
A1A continuous wave Morse code at 20 words per minute. Additional
telemetry from the on board science experiment will use CW trans-
missions up to 60 WPM.

An internet Echolink conference group is also planned to begin one-
half hour prior to launch and continue until about 30 minutes after
confirmation of the first receipt of signals from the satellite.
Information on the conference groups title will be distributed nearer
to the launch for interested stations.

Auburn's famous battle cry, "War Eagle," will be heard from space
October 28 when it is transmitted to earth from a student-built
satellite known as"AubieSat-1." Auburn University's web page in-
cludes a video about their mission:
http://ocm.auburn.edu/featured_story/aubiesat.html

Long-time AMSAT Member John Klingelhoeffer, WB4LNM serves as the
Technical Advisor in Auburn University's Student Space Program.

[ANS thanks the AubieSat-1 Team for the above information]

/EX

SB SAT @ AMSAT $ANS-296.06
Prospero to be reactivated on 137.560 MHz

AMSAT News Service Bulletin 296.06
From AMSAT HQ SILVER SPRING, MD.
October 23, 2011
To All RADIO AMATEURS
BID: $ANS-296.06

Attempts are being made to reactivate Prospero, the United Kingdom's first satellite launched on a UK-built rocket, Black Arrow, on October 28, 197 and it is hoped Amateur Radio operators will be able to hear the signals.

Roger Duthie M0RJA provides details of tests to be carried out over the next two weeks:

Some of you may have heard that a team in the UK are trying to recon-tact an old British launched satellite for the anniversary of its launch (28th October 1971).

We've been given a licence to transmit and will be testing our reengin-eered ground-segment in the next fortnight. The passes we are going to concentrate on will be as far out west as possible, as to minimise QRM from Europe. Earth is a lot more EM noisy than it was in 1971.

If anyone wants to try and tune in to the downlink, you can help ID any response we get from the old bird. To avoid interference the down-link is only planned to be active when the satellite is in range of the United Kingdom. The passes are summarised here:

https://public.sheet.zoho.com/public/rjaduthie/prospero-passes-in-the-next-fortnight

There are other passes, though these are the ones which are out west. We'll see how we do.

Roger J A Duthie M0RJA
Email: rjad at mssl.ucl.ac.uk

Prospero real-time oribtal tracking page
http://www.vk3ukf.com/Space/GadgetSatProspero.htm

Audio recordings of the 0.3 watt phase modulated signal with 2048 bit/s PCM from
Prospero on 137.560 MHz can be heard on the Sounds from Space site of Matthias Bopp DD1US: http://www.dd1us.de/spacesounds%204.html

Experiments on the Prospero satellite
http://www.uk.amsat.org/2011/09/08/experiments-on-the-prospero-satellite/

Plan to revive 1970s UK satellite on 137.560 MHz
http://www.uk.amsat.org/2011/09/05/1970s-uk-satellite-to-be-revived/

[ANS thanks Roger, M0RJA, for the above information]

/EX

SB SAT @ AMSAT $ANS-296.07
SatPC32 Version 12.8b Available

AMSAT News Service Bulletin 296.07
From AMSAT HQ SILVER SPRING, MD.
October 23, 2011
To All RADIO AMATEURS
BID: $ANS-296.07

SatPC32 version 12.8b is available for download at
http://www.dk1tb.de/downloadeng.htm

The main SatPC32 program window now displays more information such
as the date of the Keplerian elements file in use.

Before upgrading your SatPC32 installation, be sure to use the new
program (in the ZIP file) to backup your user configuration. The
upgrade erases all previous user configurations, but the new program
will restore your configurations after upgrading.

The download is a demo version that requires users to enter their
lat/lon each time the program is started. To make the program fully
functional, enter your existing registration code or purchase a
registration code from the AMSAT web site:
http://www.amsat-na.com/store/category.php?c=Software

DK1TB, the author of SatPC32 has donated the software to AMSAT.
All sales of SatPC32 are used to support AMSAT.

Here are the changes described in the What's New file:

1. SatPC32, SatPC32ISS, Wisat32 and SuM now support rotor control
of the M2 RC-2800 rotor system.

2. The CAT control functions of SatPC32, SatPC32ISS and Wisat32 have
been expanded. The programs now provide CAT control of the new Icom
transceiver IC-9100.

3. The main windows of SatPC32 and SatPC32ISS have been slightly
changed to make them clearer. With window size W3 the world map can
be stretched (only SatPC32).

4. The accuracy of the rotor positions can now be adjusted for the
particular rotor controller. SatPC32 therefore can output the rotor
positions with 0, 1 or 2 decimals. Corrections of the antenna posi-
tions can automatically be saved. In previous versions that had to be
done manually.

5. The tool 'DataBackup' has been added. The tool allows users to
save the SatPC32 program data via mouse click and to restore them
if necessary. After the program has been configured for the user's
equipment the settings should be saved with 'DataBackup'. If problems

occur later, the program can easily restore the working configuration.

6. The rotor interfaces IF-100, FODTrack, RifPC and KCT require the kernel driver IOPort.SYS to be installed. Since it is a 32-bit driver it will not work on 64-bit Windows systems. On such systems the driver can cause error messages.To prevent such messages the driver can now optionally be deactivated.

7. SuM now outputs a DDE string with azimuth and elevation, that can be evaluated by client programs. Some demo files show how to program and configure the client.

[ANS thanks Wayne Estes W9AE for the above information]

/EX

SB SAT @ AMSAT $ANS-296.08
ARISS Status - 17 October 2011

AMSAT News Service Bulletin 296.08
From AMSAT HQ SILVER SPRING, MD.
October 23, 2011
To All RADIO AMATEURS
BID: $ANS-296.08

1. Italian Students Hook Up with Astronaut Mike Fossum via ARISS

Students from Istituto Superiore "G. Curcio," Ispica, Italy participated in an Amateur Radio on the International Space Station (ARISS) contact on Friday, October 14 via telebridge station W6SRJ in California. Mike Fossum, KF5AQG answered 14 questions posed to him by the youth. He talked about what it is like to live in space, the problems encountered while working in microgravity and the experiments being conducted on the Space Station. The contact was integrated into the science curriculum covering astronomy.

2. Amateur Radio Club Contacts ISS

On Saturday, October 15, an Amateur Radio on the International Space Station (ARISS) contact was held between the Amateur Radio Morioka Club located in Morioka, Japan and Satoshi Furukawa, KE5DAW on the ISS. Seventeen students were able to ask questions of the astronaut during the radio connection. Student participants were those who went through difficult times after the tsunami devastation on March 11.

3. Astronaut Participates in JOTA

Astronaut Mike Fossum, KF5AQG participated in the Jamboree on the Air (JOTA) event. Fossum, a scoutmaster, spoke with scouts from several states on Saturday, October 15.

4. Amateur Radio Newsline Covers McFadin Interview

On October 14, the Amateur Radio Newsline Report 1783 included a story about an interview with Lou McFadin, W5DID in which he talks about his work at NASA, amateur radio and ham radio experiments in space. "Names in the News: Lew McFadin W5DID Interviewed by DX-Coffee" may be viewed here: ftp://ftp.arnewsline.org/quincy/News/news.txt

5. Astronaut Training Status

Two astronaut training sessions are planned for October 18. Dan Burbank, KC5ZSX will take part in a refresher course and Joe Acaba, KE5DAR is scheduled for a preflight session. Burbank is slated to fly with Expedition 29 in November 2011 and Acaba plans to fly with Expedition 31 in March 2012.

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms areavailable from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

147. ANS-303 AMSAT News Service Weekly Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2011-10-30 14:16:51 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <000e01cc970e$894d69b0$9be83d10$@net>
Source record: 273
Cross-posted to: rec.radio.amateur.space,rec.radio.info

AMSAT NEWS SERVICE
ANS-303

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* AMSAT Symposium This Weekend
* Symposium Registration & Banquet Reservations Deadline
* AMSAT Awards Announcement
* Speaker and Presentation List Added to AMSAT Symposium Schedule
* PW-Sat to Launch in January
* NASA ELaNa III Cubesat Launch Orbits Cubesats
* Satellite Shorts From All Over
* SatPC32 Version 12.8b Available
* ARISS Status - 24 October 2011

SB SAT @ AMSAT $ANS-303.01
AMSAT Symposium Next Weekend

AMSAT News Service Bulletin 303.01
>From AMSAT HQ SILVER SPRING, MD.
October 30, 2011
To All RADIO AMATEURS
BID: $ANS-303.01

This year's Symposium marks the 50th anniversary of the launch of the first amateur radio satellite into space. The Symposium is being held in San Jose, CA on November 4 thru November 6 which is the home of Project OSCAR, the organization that built amateur radio's first satellite. As part of our commemoration, the ARRL is bringing an OSCAR 1 prototype which has been refurbished to help highlight this significant milestone. Our banquet speaker, Lance Ginner, K6GSJ was a member of the team that built OSCAR 1; he subsequently was involved with a number of follow-on amateur radio satellite projects. Lance's presentation promises to be a fascinating

look at the early days of amateur radio in space as well as perhaps some lessons learned.

The Symposium is an excellent opportunity to learn about the success of ARISSat-1 as well as AMSAT's latest project, Fox and the steps that we're taking to continue to keep amateur radio in space. There are some excellent presentations scheduled that will cover the gamut from satellite engineering to satellite operations to education outreach.
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Along with the outstanding materials presented, Symposium offers a great opportunity to meet the AMSAT leadership (the Board of Directors members as well as Senior Officers), other satellite enthusiasts, and interact with our volunteers who are involved with our engineering projects. Symposium is both a presentation/educational opportunity as well as a social event.

If you haven't yet registered for this year's Symposium, please consider joining us. Details on the Symposium and registering can be found at:
http://www.amsat.org/amsat-new/symposium/2011/index.php
The last time that AMSAT held a Symposium in California was in 2006; this may be the best chance for AMSAT members and others living on the West Coast to participate in a Symposium and have direct interaction with the AMSAT leadership for some time. Hopefully, those of you living in the Bay Area will take full advantage of this opportunity. Alan Bowker, WA6DNR and his team have done a great job preparing for an outstanding weekend in San Jose.

See ya in San Jose!

Barry Baines, WD4ASW
President-AMSAT

[ANS thanks Barry, WD4ASW, for the above information]

/EX

SB SAT @ AMSAT $ANS-303.02
Symposium Registration & Banquet Reservations Deadline

AMSAT News Service Bulletin 303.02
>From AMSAT HQ SILVER SPRING, MD.
October 30, 2011
To All RADIO AMATEURS

BID: $ANS-303.02

This is a reminder that on Monday October 31, 2011, the
on-line registration for the 2011 AMSAT Space Symposium and
Annual Meeting will close. Also, a count is needed for the
Annual Banquet. If you are planning to attend the meeting
and/or attend the Banquet, please register as soon as
possible. After Monday, you will need to register at the
hotel.

[ANS thanks AMSAT HQ for the above information]

/EX

SB SAT @ AMSAT $ANS-303.03
AMSAT Awards Announcement

AMSAT News Service Bulletin 303.03
>From AMSAT HQ SILVER SPRING, MD.
October 30, 2011
To All RADIO AMATEURS
BID: $ANS-303.03

AMSAT Director of Contests and Awards, Bruce Paige, KK5DO says
that congratulations are in order for the latest AMSAT Awards
recipients:

The following have entered into the Satellite Communicators
Club for making their first satellite QSO:

Stephen Licht, WF2S
Jay Hitchcock, KI6WZU
Costantino Montella, IK8YSS
Jackson Wilson, KF5LOQ

The following have earned the AMSAT Communications Achievement
Award:

Clayton Coleman, W5PFG #542
Csaba-Zoltan Kertesz, YO6PIB #543
Yanko Yankov, NX9G #544
Jackson Wilson, KF5LOQ #545

The following have earned the South Africa Satellite
Communications Achievement Award:

Clayton Coleman, W5PFG #US171
Csaba-Zoltan Kertesz, YO6PIB #US172
Yanko Yankov, NX9G #US173
Jackson Wilson, KF5LOQ #US174

The following have earned their Robert W. Barbee, Jr. W4AMI
Award:

Branko Martincic, 9A3ST #74

The following have earned their Robert W. Barbee, Jr. W4AMI
5000 Award:

Gale McDaniel, KB0RZB #28

To see all the awards visit http://www.amsat.org.

[ANS thanks Bruce Paige, KK5DO for the above information]

/EX

SB SAT @ AMSAT $ANS-303.04
Speaker and Presentation List Added to AMSAT Symposium Schedule

AMSAT News Service Bulletin 303.04
>From AMSAT HQ SILVER SPRING, MD.
October 30, 2011
To All RADIO AMATEURS
BID: $ANS-303.04

AMSAT's 2011 Space Symposium is quickly approaching. It will be held on Friday, November 4th through Sunday, November 6th in San Jose, CA.

This year commemorates the 50th anniversary of the launch of OSCAR 1. Many events are planned to celebrate our 50 years of keeping amateur radio in space. The original OSCAR 1 prototype has been refurbished by the ARRL Lab. It will be on display and transmitting. Our Banquet Speaker is Lance Ginner, K6GSJ who was on the OSCAR 1 development team.

The 2011 Symposium Schedule has been posted and includes:

Thursday, November 3
0800 - 1200 AMSAT Board of Directors Meeting open to all AMSAT members
1300 - 1800 AMSAT Board of Directors Meeting open to all AMSAT members
1930 - 2200 AMSAT Board of Directors Meeting open to all AMSAT members

Friday, November 4
Symposium Registration Desk Open
0900 - 1200 AMSAT Board of Directors Meeting (Friday morning)
1:00 PM Introduction and Opening of presentations:
+ Bryan Klofas, KF6ZEO "Frequency Allocation for Government-funded CubeSats:NSF Paves the Way"
+ Bob Davis, KF4KSS "Orbital Elements and Magnetic Tumble in Excel"
+ Nick Pugh, K5QXJ "How to Light the Candle"
+ Michael Safyan, KJ6MVL "AMSAT Ames PhoneSat"
+ David Palmer, KB5WIA "A Satellite-Portable Backpacking Trip to Rare California Grid Square CM79
+ Hans van de Groenendaal, ZS6AKV "SA AMSAT CuveSat Project 'KLETSKous'"
+ Hans van de Groenendaal, ZS6AKV "Turning University CubeSats into amateur radio satellites"
+ Jan King, VK4GEY/W3GEY "Australis-OSCAR-5

Saturday, November 5
0730 Symposium Registration Desk Open
8:00 AM Introduction and Opening of presentations:
+ Lou McFadin, W5DID "Fabrication, Integration and Testing of ARISSat-1"
+ Gould Smith, WA4SXM "ARISSat-1 in Flight"
+ Douglas Quagliana, KA2UPW/5 "Decoding Satellite Telemetry form ARISSat-1"
+ Steven Bible, N7HPR "ARISSat-1 Operational Survey"
+ Gould Smith, WA4SXM "ARISSat-1 Post Mortem"
+ Tony Monteiro, AA2TX "Space Radiation and Fox Program"
+ Barry Baines, WD4ASW "The Importance of Educational Outreach for AMSAT"
+ Tony Monteiro, AA2TX "AMSAT Fox-1 Systems Overview"
+ Bob Davis, KF4KSS "Fox 1 Thermal Design"
+ Bob Davis, KF4KSS "Fox 1 Mechanical Design"
+ Alexander J Harvilchuck, N3NP "2010-2011 AMSAT NextGen Program Satellite Report"
+ Sawson Taheri, KG6NUB "OSCAR Zero from a Satellite Operator's Perspective"
+ AMSAT Annual Meeting

1700 - 1800 Break
1800 - 1900 Attitude Adjustment with Cash Bar
1900 - 2100 Banquet and Keynote Speaker and Door Prize Drawing

Sunday, November 6
0730 Area Coordinators Field Ops Breakfast
0900 IARU Meeting
1015 Meet for Sunday Tour Tech Museum of Innovation in San Jose.

Our annual gathering will also feature:

+ Space Symposium with Amateur Satellite Presentations
+ Operating Techniques, News, & Plans from the Amateur Satellite World
+ Board of Directors Meeting open to AMSAT members (Nov. 3-4)
+ Meet Board Members and Officers
+ Annual General Membership Meeting
+ Annual Banquet-Keynote Speaker and Door Prizes

The 2011 Symposium hotel and registration web pages are now available on the AMSAT web site. You may register for the Symposium and Annual Banquet at the AMSAT Store:
http://www.amsat-na.com/store/SymposiumReg.php

Visit the Symposium and Annual General Meeting web page for details and the latest information:
http://www.amsat.org/amsat-new/symposium/2011/index.php

[ANS thanks the 2011 Symposium Committee for the above information]

/EX

SB SAT @ AMSAT $ANS-303.05
PW-Sat to Launch in January

AMSAT News Service Bulletin 303.05
>From AMSAT HQ SILVER SPRING, MD.
October 30, 2011
To All RADIO AMATEURS
BID: $ANS-303.05

This week AMSAT-UK web site carried the announcement that PW-Sat, a 1U CubeSat to be launched on the first VEGA flight in January,will carry a 145 to 435 MHz Amateur Radio transponder.

The single channel transponder will operate in a similar way to AO-16.

The uplink on 145.900 MHz will be FM and the downlink on 435.020MHz will use the BPSK telemetry beacon transmitter to produce Double Sideband (DSB) that can be received on an SSB radio.

PW-Sat will be launched into a 300 by 1450km 69.5 degree orbit and may be expected to have a lifetime of about 2 years before re-entry. It was built by students of Warsaw University of Technology in cooperation with the Space Research Centre and will be Poland's first satellite.

The development and construction of this satellite, students worked with two research groups - Astronautical Students (Faculty MEiL)and Space Engineering Student (Faculty EITI). Tutor from the beginning of the project was prof. Assoc. inz. Piotr Wolanski, MEiL department.

The main objective of the project is education of students in the preparation, construction and use of artificial satellites. Specific objectives are:

+ Testing the system to develop flexible solar generation.

+ Study the deacceleration of a satellite, which will increase the resistance and its rapid descent from orbit.

+ Testing of satellite communication system including the Technical University of Warsaw, Gdynia Maritime Academy and the Centre for Astronomy them. Nicolaus Copernicus Academy of Sciences.

PW-Sat has five modes of operation:

1. Receive only mode - no downlink
2. Beacon CW mode - Downlink On-Off Keying (OOK) CW (1kHz) 12 WPM on 435.020 MHz
3. Beacon BPSK mode - Downlink BPSK (3 kHz) 1200 bps AX25 (1 frame on 20 sec) on 435.020 MHz

4. Control communication mode. Downlink BPSK (3 kHz) 1200 bps
AX25 on 435.020 MHz
5. Voice Repeater mode (aka 'AO16' mode) - Uplink145.900MHz
FM(15 kHz) Downlink 435.020MHz DSB (3 kHz)

For more information on PW-Sat in Google English see
http://tinyurl.com/CubeSatPW-Sat

IARU Amateur satellite frequency co-ordination panel pages
hosted by AMSAT-UK http://www.amsat.org.uk/iaru/

The AMSAT-UK article can be found on their web site at:
http://www.uk.amsat.org/2011/10/21/pw-sat-to-launch-in-january

[ANS thanks AMSAT-UK for the above information]

/EX

SB SAT @ AMSAT $ANS-303.06
NASA ELaNa III Cubesat Launch Orbits Cubesats

AMSAT News Service Bulletin 303.06
>From AMSAT HQ SILVER SPRING, MD.
October 30, 2011
To All RADIO AMATEURS
BID: $ANS-303.06

NASA launched five small research satellites, or CubeSats, for four universities on October 28 from Vandenberg AFB. This will be the 3rd installment of the Educational Launch of Nanosatellite (ELaNa) missions. The CubeSats are manifested as auxiliary payloads on the Delta II launch vehicle for NASA's NPOESS Preparatory Project (NPP) mission.

The ELaNa III Cubesat Launch included RAX-2, MCubed, E1P,and AubieSat are all trackable by most OSCAR stations. As of press time signals from Aubiesat-1, E1P and RAX-2 had been received.

A video with live commentary describing the computer graphics of the NPP Second Stage Burn 3 and CubeSats Deployment:
http://www.youtube.com/watch?feature=player_embedded&v=FFLmERzduUY

The ElaNa CubeSat Media Briefing with Roland Coelho, WH7BE can be viewed at:
http://www.youtube.com/watch?v=UcjM2GhMD-E&feature=player_embedded

The initial keps:
http://gs.engin.umich.edu/predictions/tle_elana3.txt.

AubieSat-1 is designed to transmit with a power of about 800 milliwatts on a frequency of 437.475 MHz, plus or minus Doppler correction. The beacon signal, along with telemetry, will be sent using A1A continuous wave Morse code at 20 words per minute. Additional telemetry from the on board science experiment will use CW trans-

missions up to 60 WPM.

AubieSat-1 Telemetry Format

For all transmissions, arbitrary digits represent digits in base 10,
capital R denotes a decimal point, and FFFF is in hexadecimal.

Basic Beacon 20wpm (for 20 sec total)
Every 1 min (Unless AS-1 is in outreach mode)

HI HI DE KI4NQO AUBIESAT 1 VB 3R68 SK (Beacon includes battery
voltage)

Outreach Beacon 20 wpm (for 75 sec total)
Every 5 min (Only when AS-1 is placed in outreach mode)

HI HI DE KI4NQO AUBIESAT 1BT (Initialize transmission)
FFFF BT (Minutes since deployment)
01 VB 3R68 TB 39R2 BT (Battery voltage and temperature)
02 P1 3R68 P2 3R68 BT (Solar Panels 1 & 2 Max Power)
EOT DE KI4NQO 73 SK (End of Transmission)

AubieSat-1 Pass Report Form

Help the AubieSat-1 Team! Please fill out the following form and
email a copy to aubiesat1data@gmail.com

Name / Call sign of HAM operator reporting:
Time and date of pass (UTC):

Your Geographical Location:
(City, State, Country)

Your Latitude and Longitude:

Signal fading cycle time: (For one complete rotation in seconds)

Copy of Transmission Received:
(Please post a verbatim copy here of any transmission from AS-1
that you receive including these telemetry values if copied:)
+ Minutes Since Deployment
+ Battery Voltage (VB)
+ Battery Temperature (TB)
+ Solar Panel 1 Max Power (P1)
+ Solar Panel 2 Max Power (P2)

Notes/Observations:

Please direct any questions to: aubiesat1@gmail.com
Thank you for your assistance!

Frequency and Modulation Summary of the CubeSat Launch:

Satellite: AubieSat-1
Downlink Freq: 437.475 MHz

EIRP: .708W
Modulation Scheme: Interrupted Continuous Wave (IWC)
Protocol: Morse Code
Baud Rate: 20wpm
http://space.auburn.edu/

Satellite: RAX-2
Downlink Freq: 437.345 MHz
Modulation Scheme: GMSK
Baud Rate: 9600
http://rax.engin.umich.edu/

Satellite: M-Cubed
Downlink Freq: 437.485MHz
EIRP: < 1W
Modulation Scheme: FSK
Protocol: AX.25
Baud Rate: 9600
http://umcubed.org/

Satellite: Explorer-1[PRIME] Flight Unit 2
Downlink Freq: 437.505 MHz
EIRP: -0.7dBW
Modulation Scheme: Non-Coherent FSK
Protocol: KISS Custom
Baud Rate: 1200
http://ssel.montana.edu/e1p/

DICE (non-amateur payload):
http://www.sdl.usu.edu/programs/dice
Explorer-1[PRIME]

[ANS thanks the AubieSat-1 Team at Auburn University for the above information]

/EX

SB SAT @ AMSAT $ANS-303.07
Satellite Shorts From All Over

AMSAT News Service Bulletin 303.07
>From AMSAT HQ SILVER SPRING, MD.
October 30, 2011
To All RADIO AMATEURS
BID: $ANS-303.07

+ Congratulations to Steve Belter, N9IP on attaining his ARRL Satellite VHF/UHF Century Club (VUCC) certificate #223.

+ The ARISS store at http://www.cafepress.com/ariss has been updated with new products.

+ What did the three astronauts do on the ISS this past week? You can watch the video update from NASA on the research and activi-

ties on the International Space Station for October 17-21, 2011, including updates on the upcoming Progress and Soyuz launches at: http://www.youtube.com/watch?feature=player_embedded&v=yAYqf5E6qIY

+ Watch the video of the October 21 debut lift off of a Russian Soyuz rocket from the edge of the Amazon jungle at the Guiana Space Center in French Guiana as it successfully carried the first two Galileo In-Orbit Validation satellites to space: http://www.youtube.com/watch?feature=player_embedded&v=c750fdZR6Mg

+ Roland Zurmely, PY4ZBZ, copied the full spectrum of signals from ARISSat with an SDR-IQ (and homemade VHF/HFconverter) and Spectra-Vue. The frequencies listed are the transmitted by satellite, and Doppler effectis clearly visible in the received signals, with higher frequencies at the beginning and lower at the end of the pass. The noise generated by linear transponder and the return of the transmission that I did in the UHF uplink are clearly visible. The CW-2 signal close to the 1kBPSK telemetry signalcan also be seen, as well as FM transmissions, switching between voice and SSTV. Please see: http://www.qsl.net/py4zbz/arissat.htm#o

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-303.08
SatPC32 Version 12.8b Available

AMSAT News Service Bulletin 303.08
>From AMSAT HQ SILVER SPRING, MD.
October 30, 2011
To All RADIO AMATEURS
BID: $ANS-303.08

SatPC32 version 12.8b is available for download at http://www.dk1tb.de/downloadeng.htm

The main SatPC32 program window now displays more information such as the date of the Keplerian elements file in use.

Before upgrading your SatPC32 installation, be sure to use the new program (in the ZIP file) to backup your user configuration. The upgrade erases all previous user configurations, but the new program will restore your configurations after upgrading.

The download is a demo version that requires users to enter their lat/lon each time the program is started. To make the program fully functional, enter your existing registration code or purchase a registration code from the AMSAT web site: http://www.amsat-na.com/store/category.php?c=Software

DK1TB, the author of SatPC32 has donated the software to AMSAT. All sales of SatPC32 are used to support AMSAT.

Here are the changes described in the What's New file:

1. SatPC32, SatPC32ISS, Wisat32 and SuM now support rotor control of the
M2 RC-2800 rotor system.

2. The CAT control functions of SatPC32, SatPC32ISS and Wisat32 have been expanded. The programs now provide CAT control of the new Icom transceiver IC-9100.

3. The main windows of SatPC32 and SatPC32ISS have been slightly changed to make them clearer. With window size W3 the world map can be stretched (only SatPC32).

4. The accuracy of the rotor positions can now be adjusted for the particular rotor controller. SatPC32 therefore can output the rotor positions with 0, 1 or 2 decimals. Corrections of the antenna positions can automatically be saved. In previous versions that had to be done manually.

5. The tool 'DataBackup' has been added. The tool allows users to save the SatPC32 program data via mouse click and to restore them if necessary. After the program has been configured for the user's equipment the settings should be saved with 'DataBackup'. If problems occur later, the program can easily restore the working configuration.

6. The rotor interfaces IF-100, FODTrack, RifPC and KCT require the kerneldriver IOPort.SYS to be installed. Since it is a 32-bit driver it will not work on 64-bit Windows systems. On such systems the driver can cause error messages.To prevent such messages the driver can now optionally be deactivated.

7. SuM now outputs a DDE string with azimuth and elevation, that can be evaluated by client programs. Some demo files show how to program and configure the client.

[ANS thanks Wayne Estes W9AE for the above information]

/EX

SB SAT @ AMSAT $ANS-303.09
ARISS Status - 24 October 2011

AMSAT News Service Bulletin 303.09
>From AMSAT HQ SILVER SPRING, MD.
October 30, 2011
To All RADIO AMATEURS
BID: $ANS-303.09

1. Upcoming School Contacts

Cherry Creek School District, Centennial, Colorado for an Amateur Radio on the International Space Station (ARISS) contact on Thursday, October 27 at 17:09 UTC via telebridge

station IK1SLD in Italy was successful. A radio technology curriculum will be provided to students in the gifted and talented program, "Inside Out" to get them interested in amateur radio. The class will cover topics from radio propagation to UTC time and space. A guest speaker will talk about meteor scatter as well. Lesson plan objectives are to understand: measuring systems, general awareness of time on the body, orbits, science experiments, intervals, sleep, and communications.

An Amateur Radio on the International Space Station (ARISS) contact was scheduled for Space Laboratory, Herzliya Science Centre, Herzliya, Israel on Friday, October 28 at 11:25 UTC. The contact was successful and will be incorporated into lessons covering the space environment, orbital mechanics, satellite design and radio communications.

2. ARISS Contact with Seiryo Elementary

Seiryo Elementary School, Seto, Aichi, Japan experienced a successful Amateur Radio on the International Space Station (ARISS) contact on Tuesday, October 18.
The contact highlighted a science curriculum covering electricity, space and technology.

3. ZST Students Contact ISS

On Friday, October 21, an Amateur Radio on the International Space Station (ARISS) contact was held between students attending Zespol Szkol Technicznych in Rybnicka, Slask, Poland and on-orbit astronaut Mike Fossum, KF5AQG. Approximately 65 students, teachers, parents, guests and media attended the event and listened as Fossum fielded 19 questions posed by the students. The SP9PKS radio club members worked with the youth to prepare them for the contact. Lesson plans included the construction of radio equipment and contacts via LEO (Low Earth Orbit) satellites. Two newspapers and four broadcast radio stations covered the contact: Dziennik Zachodni and Wiadomoci Powiatowe newspapers, Radio Zet, Radio Zote Przeboje, Tok FM, Antyradio, and local station Radio Fest.

4. ARISS International Team Meeting, October 28-29

The ARISS International Face-to-Face Meeting will be held this Friday and Saturday, October 28 and 29 at the Space Center Houston in Houston, Texas. The team will come together to share regional reports as well as status reports from the program's other committees including education, operations and hardware.

5. ARISS International Team Teleconference Held

The monthly ARISS International teleconference was held on Tuesday, October 18. The upcoming face-to-face meeting was discussed, among other topics. Minutes have been posted: http://www.rac.ca/ariss/arisstel2011-10-18.htm

6. Astronaut Training Status

On October 18 Dan Burbank, KC5ZSX was given an ARISS refresher course to prepare him for his upcoming flight with Expedition 29 in November. Joe Acaba, KE5DAR participated in a preflight session the same day. He plans to fly with Expedition 31 in March 2012.

7. ARISS Recognized by NASA Associate Administrator for Education

In a recent communication of FY2011 accomplishments to the NASA education community, NASA Associate Administrator for Education Leland Melvin highlighted the accomplishments of ARISS:

"10,743 curious students and 778 motivated educators participated in direct communication with International Space Station (ISS) crews via the Amateur Radio on the International Space Station (ARISS), sparking their interest in STEM."

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Dee Interdonato, NB2F

148. Crossposting Permitted to rec.radio.amateur.moderated

Newsgroup: rec.radio.amateur.space
Date: 2011-11-01 06:00:03 UTC
From: rram@panix.com
Message-ID: <radio/ham-radio/moderated/crossposting-1-1320127201@panix.com>
Source record: 274
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.info

```
Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/moderated/crossposting
Revision: 1.1 2009/04/12 19:42:04
Posting-Frequency: posted monthly
URL: http://www.panix.com/~rram/usenet/rram/index.html

Changes followed by "|".

After a 30-day public discussion and feedback period to gauge reader
opinions in March of 2009:

http://groups.google.com/group/rec.radio.amateur.moderated/browse_thread/thread/d7d337db35
f23326

the rec.radio.amateur.moderated Moderation Team has decided to consider
amending its charter, and permit limited simultaneous crossposting to
rec.radio.amateur.moderated and one other unmoderated
amateur-radio-related discussion newsgroup. We are currently trying
this on a temporary basis (90 days, through early July 2009), and adopt
it permanently if successful.

Approved rec.radio.amateur.* newsgroups are those that are currently
listed in the latest version of the "List of Big Eight Newsgroups" which
is crossposted monthly to news.announce.newgroups, news.groups, and
news.lists.misc.

Approved alt.radio.amateur.* and alt.ham-radio.* newsgroups are those
that have been created consistent with the suggestions in "So You Want
to Create an Alt Newsgroup" at:

http://www.faqs.org/faqs/alt-creation-guide/

Approved regional hierarchy newsgroups are those that contain either
"radio.amateur" or "ham-radio" in their names, including
uk.radio.amateur and aus.radio.amateur.misc.

We will make every reasonable effort to keep our list of approved
newsgroups up-to-date. In case we have overlooked any, and a submission
is rejected in error as a result, the rejected submitter can E-mail us
at our administrative contact address (in the signature at the bottom of
this article, and the default Reply-To for the rejection message)
requesting that it be added, and that the article be approved. We may
still choose to reject articles crossposted to any alt.* newsgroup with
an inappropriate name, including obscene language, embedded
name-calling, or encouragement of unlawful conduct.
```

Please direct any comments, questions, or criticisms to
rec-radio-amateur-moderated-request@panix.com.

149. Weekly Highlights of Solar and Geomagnetic Activity, 24 - 30 October 2011

Newsgroup: rec.radio.amateur.space
Date: 2011-11-01 21:30:08 UTC
From: SWPC.Webmaster@noaa.gov
Message-ID: <20111101213001.CC46533C8E@panix2.panix.com>
Source record: 275
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.info

```
:Product: Weekly Highlights and Forecasts
:Issued: 2011 Nov 01 2020 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
# Weekly Highlights and Forecasts
#
Highlights of Solar and Geomagnetic Activity
24 - 30 October 2011

Solar activity has been at very low to low levels. Very low levels
were observed on 24 October while low levels dominated the remainder
of the summary period. Despite the large size and magnetic
complexity (Beta-Gamma) of Region 1330 (N08, L=249, class/area,
Eko/560 on 24 October), the region only managed three low level
C-flares on 25 and 30 October. Region 1324 (N11, L=305, class/area,
Ekc/360 on 20 October) was the largest producer of low level C-class
activity with a total of five flares; the largest of the period, a
C3 that occurred at 29/1452 UTC. Four relatively slow-moving CMEs
were observed in association with disappearing solar filaments
beginning at 22/0058 UTC, 26/0800 UTC, and 28/0218 UTC, and finally
28/1652 UTC, observed in SOHO/LASCO imagery. The first event became
geoeffective late on 24 October while a glancing blow from the
second event arrived early on the 30 October, and third CME is not
expected to be geoeffective. The final CME is expected to arrive
sometime on 31 October.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at
normal levels the entire period.

The geomagnetic field ranged from quiet to severe storm levels. The
period began with solar wind speeds, as measured by the ACE
Spacecraft, steady near 300 km/s with the total interplanetary
magnetic field (IMF Bt) around 6 nT. The geomagnetic field was quiet
during these periods. By late on 24 October, an interplanetary shock
was observed in ACE data at 24/1748 UTC in association with the CME
from 22/0058 UTC. A Sudden Impulse (SI) was observed at the Boulder
magnetometer of 13 nT at 24/1832 UTC. Solar wind velocities
increased from a steady 350 km/s to about 525 km/s. The IMF Bt
increased to above 20 nT from about 24/2000 UTC through 25/1300 UTC
and gradually decreased to about 8 nT by late on 25 October. The Bz
```

component of the IMF reached southward values of -20 nT from about 24/2000 UTC through 25/0000 UTC. The geomagnetic field from 24/1800 UTC - 25/1200 UTC responded with active to major storm periods with an isolated severe storm period observed from 24/2100-2400 UTC. By 26 October, solar wind speed declined to around 400 km/s with the IMF Bt around 7 nT. Solar wind speed continued to decline to approximately 300 km/s by the end of the period. The geomagnetic field was mostly quiet the rest of the period.

Forecast of Solar and Geomagnetic Activity
02 November - 28 November 2011

Solar activity is expected to be at predominately low to moderate levels from 02 November - 15 November as Regions 1338 (S12, L=119, class/area Dao/120 on 01 November) and 1339 (N22, L=117, class/area Dao/180 on 01 November) rotate further onto the visible solar disk. A return to mostly low levels is expected for the remainder of the period.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at normal to moderate levels throughout the period.

The geomagnetic field is expected to be generally unsettled on 02 November as the effects of a CME wane. Predominantly quiet conditions are expected from 03-04 November. An increase to unsettled to active conditions is expected from 05-07 November as the combined effects of a coronal hole high speed stream (CH HSS) and another CME are expected. A return to quiet levels is expected from 08-10 November. Another small increase to unsettled conditions is expected from 11-13 November, as another CH HSS becomes geoeffective. A return to predominantly quiet levels is expected from 14 - 25 November. Quiet to unsettled levels are expected for the remainder of the period, as another CH HSS becomes geoeffective.

150. ANS-310 AMSAT News Service Weekly Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2011-11-06 01:14:28 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <001001cc9c21$69ec9d30$3dc5d790$@net>
Source record: 276
Cross-posted to: rec.radio.amateur.space,rec.radio.info

AMSAT NEWS SERVICE
ANS-310

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* AMSAT Board of Directors Names Senior Officers for 2011-2012
* Project OSCAR and AMSAT Commemorate 50th Anniversary of OSCAR 1
* ARISSat-1/KEDR Team Challenge to Catch the Last ARISSat-1 Telemetry
* Asteroid Ping Experiment November 8 For Suitably Equipped Stations
* Montana State University Explorer-1 Prime Cubesat Featured in Press
* Satellite Shorts From All Over

SB SAT @ AMSAT $ANS-310.01
AMSAT Board of Directors Names Senior Officers for 2011-2012

AMSAT News Service Bulletin 310.01
>From AMSAT HQ SILVER SPRING, MD.
November 6, 2011
To All RADIO AMATEURS
BID: $ANS-310.01

Election of AMSAT's Senior Officers was one of the first orders of business to be settled once the AMSAT Board of Directors meeting opened on November 3, prior to the start of the 2011 AMSAT Space Symposium held in San Jose, California.

The following positions were voted upon and filled:

Barry Baines, WD4ASW President
Drew Glasbrenner, KO4MA Vice-President Operations
Gould Smith, WA4SXM Vice President User Services
Tony Monteiro, AA2TX Vice-President Engineering
Alan Biddle, WA4SCA Secretary
Keith Baker, KB1SF/VA3KSF Treasurer
Martha Saragovitz Manager

The following Senior Officer positions remained open at this time
awaiting appointments:
Executive Vice President
Vice-President Human Spaceflight
Vice-President Marketing

The AMSAT Board of Directors elected on September 15 include:
Barry Baines, WD4ASW
Alan Biddle, WA4SCA
Dr. Thomas A. Clark, K3IO
Drew Glasbrenner, KO4MA
Lou McFadin, W5DID
Tony Monteiro, AA2TX
Gould Smith, WA4SXM
Mark Hammond, N8MH (First Alternate)
Patrick Stoddard, WD9EWK (Second Alternate)

Other items on the Board of Directors agenda included:

+ Reports from the President, Secretary, and Treasurer
+ Budget approval for 2012
+ Technical Issues to be addressed included:
o Regulatory Issues Affecting AMSAT (ITAR and HR607)
o ARISSat-1
o Project Fox
o ARISS and ARISS-International
o AMSAT Lab Update/Storage
o Operations Team Report
o User Services Report

Details of these reports will be presented in upcoming ANS bulletins
and in The AMSAT Journal.

[ANS thanks the AMSAT Board of Directors for the above information]

/EX

SB SAT @ AMSAT $ANS-310.02
Project OSCAR and AMSAT Commemorate 50th Anniversary of OSCAR 1

AMSAT News Service Bulletin 310.02
>From AMSAT HQ SILVER SPRING, MD.
November 6, 2011
To All RADIO AMATEURS
BID: $ANS-310.02

The AMSAT 2011 AMSAT Space Symposium coincides with the cele-
bration of the 50th anniversary of OSCAR 1.

Bob Allison, WB1GCM of ARRL's Technical Lab led the effort to
refurbish the OSCAR 1 prototype on display at ARRL headquarters.
With the help of Symposium Banquet Speaker and OSCAR 1 developer
Lance Ginner, K6GSJ, Bob and his team got OSCAR 1 operational
again.

The refurbished OSCAR-1 was on display at the ARRL exhibit area at the 2011 Dayton Hamvention. The OSCAR 1 prototype was again on display during the AMSAT Symposium where everyone was able to once again hear the CW transmissions (now managed by a PIC controller) in the 145 MHz band.

Additionally, the AMSAT News Service will re-run the weekly Project OSCAR Newsletters to commemorate the 50th anniversary of OSCAR 1. During the November/December 2011 time frame you will be able to share the excitement of the launch campaign that started it all 50 years ago.

Watch for the re-publication of the Project OSCAR Newsletters in the AMSAT Journal. The Newsletters were hand-typed back in 1961. Thanks to Don Ferguson, KD6IRE for scanning the original documents announcing OSCAR 1.

[ANS thanks Project OSCAR and the 2011 Symposium Committee for the above information]

/EX

SB SAT @ AMSAT $ANS-310.03
ARISSat-1/KEDR Team Challenge to Catch the Last ARISSat-1 Telemetry

AMSAT News Service Bulletin 310.03
>From AMSAT HQ SILVER SPRING, MD.
November 6, 2011
To All RADIO AMATEURS
BID: $ANS-310.03

Now that the submissions are complete for the Chicken Little Contest AMSAT is announcing a new contest to "Catch the Last ARISSat-1 Telemetry."

With luck, we will have real time data to go along with the final re-entry. While telemetry sent by e-mail is valuable and requested, this contest will be judged solely on data sent through the official ARISSatTLM programs directly to the Internet telemetry server.

How do you enter? Simple. Just submit ARISSat-1 telemetry over the Internet using either ARISSatTLM telemetry program. You can use the PC version or the MAC version of ARISSatTLM and you are automatically eligible.

Are there separate categories for entrants? No.

How is the winner determined? The call, or name, in the last block of data received by telemetry server wins.

How will the winner be announced? Via the usual AMSAT News Service, and on the Chicken Little Contest site.
(see: http://www.amsat.org/amsat-new/ARISSat/ARISSatContest)

If ARISSat-1 fails sometime before reentry, does it count? Yes!
Engineering data is essential input for future projects!

What do I get if I win? A certificate in PDF format suitable for
framing, and the gratitude of the ARISSat-1/KEDR team.

In short, just keeps those telemetry blocks flowing!

Remember: you can see the latest ARISSat-1 telemetry at
http://www.arissattlm.org/live

[ANS thanks the ARISSat-1/KEDR Team for the above information]

/EX

SB SAT @ AMSAT $ANS-310.04
Asteroid Ping Experiment November 8 For Suitably Equipped Stations

AMSAT News Service Bulletin 310.04
>From AMSAT HQ SILVER SPRING, MD.
November 6, 2011
To All RADIO AMATEURS
BID: $ANS-310.04

On Tuesday, November 8, at 6:28 p.m. EST, an asteroid the size of an aircraft carrier will soar past our planet at a distance closer than the Moon and NASA scientists will be watching! Suitably equipped amateur stations may enjoy looking over their shoulder ...

The 400 meter diameter near-Earth asteroid 2005 YU55 will be making
a 0.85 lunar distance flyby of Earth on November 8. Michael Busch at
the UCLA Department of Earth and Space Sciences notes this may an
opportunity for amateur satellite operators to observe the fly-by.

UCLA will be conducting an extensive campaign of radar observations
with the Arecibo Observatory, the Deep Space Network Goldstone facil-
ity, and the Green Bank Telescope and the Very Long Baseline Array.

Because YU55 will be so close to Earth, its radar echo will be
detectable with even small antennas (~1 m^2). YU55's echo will be
a slowly drifting signal with a bandwidth of ~1 Hz within a few kHz
of 2380 MHz or 8560 MHz.

This will present amateur radio operators an opportunity to receive
the radar reflections off of the asteroid because of the big dish,
big signals originating from Arecibo and Goldstone.

On November 8, 2011, 19:15 - 19:30 UTC, Arecibo will be transmitting
a continuous wave tuned to put the asteroid's echo at a constant
2380.000000 MHz at the Green Bank Telescope. Observers elsewhere on
Earth will see the echo within 2 kHz of 2380 MHz, Doppler-shifted by
the Earth's rotation. It will be slowly drifting in frequency and
have a bandwidth of ~0.6 Hz.

On November 9, 2011, 01:30 - 02:00 UTC, the Goldstone Deep Space Network facility will be be transmitting a continuous wave tuned to put the asteroid's echo a constant 8560.000000 MHz at a second antenna at the Goldstone site. Other observers may see the echo shifted by as much as 6 kHz, and it will have a bandwidth of ~2 Hz.

Initial information can be found on-line at:
http://echo.jpl.nasa.gov/asteroids/2005YU55/2005YU55_planning.html

UniverseToday posted an article about this event at:
http://tinyurl.com/438kznj

[ANS thanks Michael Busch, UCLA Department of Earth and Space Sciences for the above information]

/EX

SB SAT @ AMSAT $ANS-310.05
Montana State University Explorer-1 Prime Cubesat Featured in Press

AMSAT News Service Bulletin 310.05
>From AMSAT HQ SILVER SPRING, MD.
November 6, 2011
To All RADIO AMATEURS
BID: $ANS-310.05

Space-Travel.com posted a story about Montana State University's Explorer-1 Prime Cubesat launched on October 28 from Vandenberg AFB in California. (see: http://tinyurl.com/6h7opyf for their full report)

Montana State University now has a satellite in space. Shortly before 4 a.m. Mountain time on October 28, a student-built satellite called Explorer-1 [Prime] roared into the sky on a NASA rocket.

Within three hours of launch, ham radio operators in France, England and The Netherlands had reported hearing from the satellite. A few minutes later, the satellite was heading over the North Pole toward Alaska.

Approximately 125 students designed, built and tested the satellite over the past five years. The satellite, sponsored by the Montana Space Grant Consortium, was MSU's first satellite to make it into orbit. A previous satellite, called MEROPE, rode onboard a Russian rocket that crashed in 2006. A twin to Explorer-1 [Prime] was launched in March this year, but it failed to reach orbit because of an anomaly with the TAURUS-XL rocket that carried it.

But when NASA's satellite separated from the rocket Friday morning, the students started cheering. Half an hour later, when the Explorer-1 [Prime] sprang from its container and entered orbit, no one held back.

MSU's satellite was one of six university-built satellites onboard the Delta II rocket. All six are aluminum cubes weighing no more than 2.2 pounds and measuring about four inches per side. That standardized size allows university-built satellites, called "CubeSats," to fit

into an enclosed container called a P-POD.

The Explorer-1 [Prime] will circle the Earth every 90 minutes in an 283 to 503 mile elliptical orbit.

MSU built the Explorer-1 [Prime] to replicate the scientific mission of the Explorer-1 mission which was launched on Jan. 31, 1958, and detected the existence of a band of energetic charged particles held in place by the Earth's magnetic field.

The band was named the Van Allen Radiation Belt after the late James Van Allen, who directed the design and creation of instruments on Explorer-1.

Satellite: Explorer-1[PRIME] Flight Unit 2
Downlink Freq: 437.505 MHz
EIRP: -0.7dBW
Modulation Scheme: Non-Coherent FSK
Protocol: KISS Custom
Baud Rate: 1200
http://ssel.montana.edu/e1p/

[ANS thanks Space-Travel.com for the above information]

/EX

SB SAT @ AMSAT $ANS-310.06
Satellite Shorts From All Over

AMSAT News Service Bulletin 310.06
>From AMSAT HQ SILVER SPRING, MD.
November 6, 2011
To All RADIO AMATEURS
BID: $ANS-310.06

+ ARISS School Contacts this week from the ISS will present addi-
tional opportunities to directly copy the downlink from orbit on
145.800 MHZ:

Rehabilitationszentrum f�r Kinder und Jugendliche, Affoltern am
Albis, Switzerland, direct via HB9TSO on Wed 2011-11-09 14:21:11
UTC 75 deg

Donald P. Sutherland School, Nassau, New York, direct via N2SQU
on Thu 2011-11-10 19:35:18 UTC 58 deg (via AJ9N)

+ A nice on-line satellite activity logger can be found at:
http://dxworld.com/satlog.html (via WA4HFN)

+ The original TV news reports about the United Kingdom's first Ama-
teur Radio satellites, UOSAT-1 (OSCAR-9) and UOSAT-2 (OSCAR-11),
can now be seen on the web. In 'Talking Satellite', made Feb. 15,
1983, Martin Sweeting G3YJO talks about OSCAR-9 and it's speech
synthesizer. In 'British Satellite', made February 7, 1984, Martin

Sweeting G3YJO talks about OSCAR-11 due to be launched the following month. Links to both videos are posted on the Southgate ARC News website: http://tinyurl.com/64lvghw

+ A TV news report first broadcast Aug. 4, 1985 shows a contact between RSGB HQ in Potters Bar and Astronaut Tony England W0ORE in the Challenger shuttle on mission STS 51-F. Tony W0ORE was running a Motorola model MX-340 handheld 2-meter transceiver and a Robot Research model 1200C slow-scan television scan converter with an antenna fitted on the inside of one of Challengers windows. RSGB General Manager David Evans G3OUF was among those at the Society's station GB3RS. It is believed the voice contact was carried out on 145.550 MHz FM and the RSGB HQ team acheived a first with a two-way exchange of Slow Scan TV (SSTV) pictures. A link to the video is is posted on the Southgate ARC site at: http://tinyurl.com/673f4k8

+ Amateur Radio Satellite activity and instruction video by the Hams in Space Team at Bennett Spring State Park, Missouri is posted at: http://www.youtube.com/watch?feature&#65533;ayer_embedded&v&#65533;CgiljwQgQ
The Hams in Space web page is at: http://hamsinspace.com/

+ Watch the laws of physics in action as the International Space Station is boosted into a higher orbit. While Expedition 29 Commander Mike Fossum and Flight Engineers Satoshi Furukawa and Sergei Volkov float freely the acceleration of the orbiting complex is evident. See: http://tinyurl.com/6gg996y (nasa.gov)

+ A 500+ page free book is available for download from the NASA Archives. "Read You Loud and Clear! ... The Story of NASA's Spaceflight Tracking and Data Network", by Sunny Tsiao can be found at: http://tinyurl.com/655t765 (nasa.gov)

+ The next Hudson Valley Satcom net is November 10 at 8PM EST (UTC-5). You can tune in via the 146.970 MHz Mt. Beacon repeater, PL 100.0 or via EchoLink on the N2EYH-L node. More info is available at: http://www.hvsatcom.org (Stu, WA2BSS)

[ANS thanks everyone for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office. And with that, please keep in mind the ham who was taken to the emergency room after accidentally swallowing a handful of coins. When the doctor asked the nurse about the patient's condition, the reply was, "No change yet!"

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

151. Radio Meteor Obs. Bull. October 2011 Draconids Orionids

Newsgroup: rec.radio.amateur.space
Date: 2011-11-06 11:22:48 UTC
From: Chris Steyaert <observations@rmob.org>
Message-ID: <kercb75nc19n614s51ge0ap8a6l6vn1p11@4ax.com>
Source record: 277
Cross-posted to: rec.radio.amateur.space,sci.astro.amateur

Radio Meteor Observation Bulletin No. 219 of October 2011 (89 K) is available now as

http://www.rmob.org/rmobtext/rmob1110.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

Chris

152. Weekly Highlights of Solar and Geomagnetic Activity, 31 October - 06 November 2011

Newsgroup: rec.radio.amateur.space
Date: 2011-11-08 22:30:05 UTC
From: SWPC.Webmaster@noaa.gov
Message-ID: <20111108223001.6936033C8E@panix2.panix.com>
Source record: 278
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.info

```
:Product: Weekly Highlights and Forecasts
:Issued: 2011 Nov 08 2040 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
# Weekly Highlights and Forecasts
#
Highlights of Solar and Geomagnetic Activity
31 October - 06 November 2011

Solar activity was low to high. Activity began at moderate levels on
31 October with two M1 flares. The first, which was associated with
a coronal mass ejection (CME), occurred at 31/1508 UTC and the
second was a long duration flare at 31/1808 UTC, both from regions
that had not yet rotated onto the visible disk. Low level activity
occurred on 01 November from newly visible Regions 1338 (S14, L=121,
class/area Ehi/375 on 03 November) and 1339 (N19, L=102, class/area
Fkc/1540 on 04 November). Moderate level activity returned on 02
November due to an M4/Sn long duration flare at 02/2201 UTC from
Region 1339. On 03 November, activity increased to high levels when
beta-gamma-delta magnetic configuration Region 1339 produced an
X1/2b flare at 03/2027 UTC associated with a 620 sfu Tenflare. In
addition, the Region produced two M-class flares, an M2/Sf at
03/1111 UTC and an M2/1n at 03/2336 UTC. Activity returned to
moderate levels for the remainder of the period with Region 1339
producing six M-class events between 04 - 06 November, the largest
flare being an M3/1f at 05/0334 UTC.

A greater than 10 MeV proton enhancement began at about 04/0100 UTC,
peaked at 3.6 pfu at 04/0905 UTC and decayed to background levels by
midday on 05 November. The source of this enhancement was unknown.
Proton flux gradually returned to background levels during the
remainder of the period.

The greater than 2 MeV electron flux at geosynchronous orbit was at
normal levels on 31 October - 02 November and normal to moderate
levels 03 - 06 November.

The geomagnetic field ranged from quiet to severe storm levels. On
31 October, an active period was observed near the time solar wind
speed at ACE peaked at 450 km/s due to the effects of a favorably
positioned coronal hole high speed stream (CH HSS). On 01 November
```

at approximately 0817 UTC, a shock arrival was observed at the ACE spacecraft and a sudden impulse (SI) of 18 nT was observed on the Boulder magnetometer at 01/0907 UTC. This transient passage brought geomagnetic activity up to severe storm levels at high latitudes and active to minor storm levels at mid latitudes. Persistent effects from the coronal transient carried over into 02 November with quiet to active levels and minor to major storm periods at high latitudes. Quiet activity prevailed on 03 - 06 November.

Forecast of Solar and Geomagnetic Activity
09 November - 05 December 2011

Solar activity is expected to be at predominately low levels through the period. M-class activity is likely from 07 - 14 November with a slight chance for X-class activity all due to the complex nature of Region 1339. M-class probabilities decrease to a slight chance from 15 - 23 November, with a less than 10 percent chance for X-class activity after Region 1339 departs the visible disk on 14 November. Region 1339 is projected to return on 24 November, raising M-class probabilities for the remainder of the period.

A slight chance for a proton event exists from 07 - 14 November due to the complex nature of Region 1339. Proton event probabilities decrease after Region 1339 departs the visible disk on 14 November. Probabilities will increase slightly on 24 November when Region 1339 is projected to return if it remains as magnetically complex as it is this rotation.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at normal to moderate levels throughout the entire forecast period.

The geomagnetic field is expected to be generally quiet levels for the majority of the period. Quiet to unsettled levels are expected from 11 - 12 November due to a small, recurrent CH HSS and a weak CME observed on 08 November in association with a disappearing filament. Mostly quiet conditions are expected from 13 - 25 November. Quiet to unsettled conditions are expected on 26 - 27 November due to a recurrent CH HSS followed by a return to quiet levels for the remainder of the period.

153. WSR-314 AMSAT Weekly Satellite Report

Newsgroup: rec.radio.amateur.space
Date: 2011-11-10 15:58:56 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <000b01cc9fc1$a1d30f10$e5792d30$@net>
Source record: 279
Cross-posted to: rec.radio.amateur.space,rec.radio.info

```
This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-314.S1
WSR 314 Part 1 11/10/2011

AMSAT NEWS SERVICE BULLETIN 314.S1
FROM AMSAT HQ SILVER SPRING, MD, November 10, 2011
TO ALL RADIO AMATEURS
BID: $WSR-314.S1

ARISSat-1 (Radioskaf-b) (Kedr)
Catalog number: 37772
Launch date: August 03, 2011 1843z
Launch site: International Space Station

Status: Operational

Callsign: RS01S

Current Mode(s):
Linear Transponder: U/v
Uplink: 435.758 to 435.742 MHz CW/LSB
Downlink: 145.922 to 145.938 MHz CW/USB

FM Telemetry/SSTV/Messages/ID:
Downlink: 145.950 MHz FM

Telemetry/Beacon:
Downlink: 145.939 MHz CW1
145.919 MHz CW2
145.920 MHz 1k BPSK USB
145.920 MHz 400b BPSK USB

Official Webpage:http://www.amsat.org/amsat-new/ARISSat/ARISSat.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/informal_detail.php?serialnum=89
[08112011]
=====
SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009 1555z
```

Launch site: Baikonur, Kazakhstan

Status: Recovery

Callsign: ZS0SUM

Uplink: 145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=88
[09292011]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=68
[02092011]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05, 2005 0444z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.9360 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=30

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[02092011]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004 0745z
Launch site: Baikonur, Kazakhstan

Status: Semi-operational - IHU crash each eclipse

Current Mode(s):
Voice repeater: V/u
Uplink: 145.880 MHz FM
Downlink: 435.150 MHz FM

Telemetry: Recovery efforts
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.880 MHz FM
145.920 MHz FM
145.920 MHz FM - 67 Hz PL tone burst
1268.705 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.703 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=19
[06162011]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002 1700z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4
Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the re-
peater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
the 10 minute timer.
[02092011]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993 0140z
Launch site: Kourou, French Guiana

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[02092011]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974
Launch site: Vandenberg AFB, California, USA

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
145.972 MHz CW
435.100 MHz CW
2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02092011]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
Kourou, French Guiana
Uchinoura Space Center, Japan
Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - OFF
APRS - OFF
SSTV - OFF

Expedition 29 Crew (May - September 2011):
Commander: Micheal Fossum KF5AQG
Flight Engineer: Sergey Volkov KE5DAW
Flight Engineer: Satoshi Furukawa
Flight Engineer:
Flight Engineer:
Flight Engineer:

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[09222011]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-314.S2
WSR 314 Part 2 11/10/2011

AMSAT NEWS SERVICE BULLETIN 314.S2
FROM AMSAT HQ SILVER SPRING, MD, November 10, 2011
TO ALL RADIO AMATEURS
BID: $WSR-314.S2

JUNGU
Catalog Number:

Launch Date: October 12, 2011 05:30:00 UTC
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink: 145.??? MHz 1k2 (mode?)
Downlink: 437.505 MHz 9k6 (mode?)

Beacon: 437.275 MHz 15 wpm (?) CW

Callsign:

URL: http://www.iitk.ac.in/me/jugnu/index.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=160
[11102011]
=====
SRMSAT
Catalog Number:
Launch Date: October 12, 2011 05:30:00 UTC
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink: 145.900 MHz 1k AX.25 (speed?)
Downlink: 437.500 MHz 2k4 AX.25

Beacon: 437.425 MHz 12 wpm CW

Callsign:

URL: http://srmsat.in/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=181
[11102011]
=====
E1P Explorer 1 [Prime] CubeSat (E1P-U2)
Catalog Number:
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink: 437.305 MHz (???)
Downlink: 437.505 MHz AX.25 (SSB?)

Beacon:

Callsign:

URL: http://ssel.montana.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=116

[11102011]
=====
M-Cubed
Catalog Number:
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink:
Downlink: 437.485 MHz AX.25

Beacon:

Callsign:

URL: http://umcubed.org/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=215
[11102011]
=====
RAX-2
Catalog Number:
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink:
Downlink: 437.345MHz 9k6 GMSK

Beacon:

Callsign:

URL: http://rax.engin.umich.edu//

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=221
[11102011]
=====
FO-71 AubieSat-1
Catalog Number:
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink:
Downlink: 437.475 MHz 1k2 AX.25

Beacon: 437.475 MHz CW

Callsign: KI4NQO

URL: http://www.space.auburn.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=148
[11102011]
=====
O/OREOS
Catalog Number: 37224
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.035 MHZ AX.25

Beacon:

Callsign:

URL: http://www.ooreos.org/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=146
[02092011]
=====
Rax-1 Radio Aurora Explorer
Catalog Number: 37223
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.505 MHz 9k6 GMSK

Beacon:

Callsign: RAX-1

URL: http://rax.engin.umich.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=165
[02092011]
=====
FO-69 Fastrac-1 Sara Lily
Catalog Number: 37227
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Operational

Uplink 1: 145.980 MHz 1k2 baud
Uplink 2: 145.825 MHz 1k2 baud
Downlink: 437.345 MHz 1k2 and 8k6 baud

Beacon: 437.435 MHz 1k2 AX.25

Callsign: Fast1

URL: http://fastrac.ae.utexas.edu/index.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=83
[07052011]
=====
FO-70 Fastrac-2 Emma
Catalog Number: 37380
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Operational

Uplink 1: 435.025 MHz 1k2 baud
Uplink 2: 437.435 MHz 9k6 baud
Downlink: 145.825 MHz

Beacon: 145.825 MHz 1k2 AX.25

Callsign: Fast2

URL: http://fastrac.ae.utexas.edu/index.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=84
[07052011]
=====
StudSat
Catalog Number: 36796
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink: 437.505MHz, 9600bps FSK
Downlink: 437.505MHz, 9600bps FSK
Beacon : 437.505MHz, 20bps ASK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=164
[02092011]
=====
TIsat-1
Catalog Number: 36799
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On orbit

Callsign: HB9DE

Uplink: 145.980MHz FM, AFSK
Downlink: 437.305MHz FM, AFSK
Beacon: 437.305MHz CW

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=118
[02092011]
=====
HO-68 HOPE-1 (CAS-1)(XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009 0231z
Launch site: Taiyuan Space Center, PRC

Status: Beacon only

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
145.9250 - 145.9750 MHz SSB/CW
145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
435.7650 - 435.7150 MHz SSB/CW
435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=108

For more information about XW-1 (CAS-1):
http://
[08112011]
=====
SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w): 437.5050MHz FSK 1k2bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=109
[02092011]
=====

UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
437.3850 MHz FSK 9k6bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=110
[02092011]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=113
[02092011]
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
Beacon(500mw): 436.000MHz GMSK 9k6bp
[02092011]
=====
CP-6
Catalog Number: 35003
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: Operational

Downlink: 437.365 MHz 1k2 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=121
[02092011]

=====
HAWKSAT 1
Catalog number: 35004
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: operational

Downlink: 437.345 MHz ?

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=105
[02092011]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: Operational

Downlink: 437.465 MHz 1k2 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=94
[02092011]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009 0115z
Launch Site: Satish Dhawan Space Centre, India

Status: ?

Downlink: 435.000 MHz
Uplink: 145.800 MHz

Telemetry: 137.400 MHz
[02092011]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon: 437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=101
[02092011]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: In Orbit

Downlink: 437.375 MHZ FSK9k6/CW
Beacon: 437.375 MHz FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[02092011]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
437.465 MHz FM/CW
Beacons: 437.305 MHz FM/CW
437.275 MHz FM/CW

Callsigns: JR5YBN
JR5YBO

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[02092011]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Downlink: 437.455 MHz AFSK/CW
Beacon: 437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[20092011]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon: 437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[02092011]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008 1520z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Curent Modes: Telemetry
Audio
Images

Downlinks: 435.315 MHz
435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02092011]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web
page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=46
[02092011]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=60
[02092011]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational ?

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL
=/satellites/status.php
[07052011]
=====
Compass-1

Catalog number: 32787
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Current Mode: dependant on last received command

Uplink: 145.980 MHz FM
Downlink: 437.275 Mhz CW
437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[06162011]
=====
CO-66 Seeds II
Catalog number:
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web
page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL
=/satellites/status.php
[02092011]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=72
[02092011]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=74
[02092011]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005 0652z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=37
[02092011]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003 1415z

Launch site: Plesetsk Missile and Space Complex, Russia

Status: ?????

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[02092011]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004 0745z
Launch site: Baikonur, Kazakhstan

Status: Semi-operational - IHU crash each eclipse

Current Mode(s):
Voice repeater: V/u
Uplink: 145.880 MHz FM
Downlink: 435.150 MHz FM

Telemetry: Recovery efforts
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.880 MHz FM
145.920 MHz FM
145.920 MHz FM - 67 Hz PL tone burst
1268.700 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.708 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP

L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=19
[06162011]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[02252011]
=====
CO-55 Cute-1.7+APD II
Catalog Number: 27844
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Current Mode: CW downlink worldwide
AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=78
[02092011]
=====
NO-44 PCSAT
Catalog number: 26931

Launch Date: September 30, 2001 0240z
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[02092011]
=====
RS-22 RADIO SPORT 22 (MOZHAYETS 4)
Catalog number: 27939
Launch Date: September 27, 2003 0612z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02092011]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990
Launch site: Kourou, French Guiana

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
145.860 MHz 1200-baud Manchester FSK
145.880 MHz 1200-baud Manchester FSK
145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[02092011]

=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984
Launch site: Vandenburg AFB, California, USA

Status: Operational ?

Current Mode: /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz
Mode-S Beacon: 2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[07052011]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
Kourou, French Guiana
Uchinoura Space Center, Japan
Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - OFF
APRS - OFF
SSTV - OFF

Expedition 29 Crew (May - September 2011):
Commander: Micheal Fossum KF5AQG
Flight Engineer: Sergey Volkov KE5DAW
Flight Engineer: Satoshi Furukawa
Flight Engineer:
Flight Engineer:
Flight Engineer:

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM

Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[09222011]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-314.S3
WSR 314 Part 3 11/10/2011

AMSAT NEWS SERVICE BULLETIN 314.S3
FROM AMSAT HQ SILVER SPRING, MD, November 10, 2011
TO ALL RADIO AMATEURS
BID: $WSR-314.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NANOSAIL-D
Catalog Number:
Ejection Date: January 17, 2011

Status: On orbit

Downlink: 437.270 MHz AX.25

URL: http://nanosaild.engr.scu.edu/dashboard.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=115
[01272011]
=====
CP4
Catalog Number: 31132
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=79
[09062010]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=76
[09062010]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=51
[09062010]
=====
NCUBE-2

Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.250

Official Website: http://www.ncube.no

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=24
[09062010]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink 2401.835 MHz 38k4 packet

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=54
[09062010]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=53
[09062010]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842

Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks: 145.850 MHz
145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks

V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON General Beacon(GB) Middle Beacon(MB) Engineering Beacon(EB)
2 m none 145.898 MHz none
70cm 435.438 MHz 435.588 MHz 435.838 MHz
13cm(1) 2400.188 MHz 2400.338 MHz 2400.588 MHz
13cm(2) 2401.173 MHz 2401.323 MHz 2401.573 MHz
3cm 10450.975 MHz 10451.125 MHz 10451.375 MHz
1.5cm 24047.885 MHz 24048.035 MHz 24048.285 MHz
[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
145.890 FM
145.930 FM
1269.700 FM
1269.800 FM
1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[07172010]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink: 435.1380 MHz AFSK 1200 BPS
Downlink: 435.2060 MHz AFSK 1200 BPS
Uplink: 145.8150 MHz AFSK 1200 BPS
Uplink: 145.8350 MHz AFSK 1200 BPS
Uplink: 145.8550 MHz AFSK 1200 BPS
Uplink: 145.8750 MHz AFSK 1200 BPS
[06042009]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
145.870 MHz FM
145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[101432011]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks: 145.875 MHz FM 1200-baud
145.900 MHz FM 1200-baud
145.925 MHz FM 1200-baud
145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html

[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink: 435.0625 MHz FM 1k2bps AFSK
435.1125 MHz FM 1k2bps AFSK
435.1375 MHz FM 1k2bps AFSK
Downlink: 145.9750 MHz FM 1k2bps AFSK
2446.5025 MHz FM 1k2bps AFSK

Beacon: 2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink: 435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons: 435.795 MHz CW
435.910 MHz AX25

Voice Transponder:
Uplink: 145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks: 145.850 MHz
145.870 MHz
145.890 MHz
145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz

[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode: V/u

Uplink: 145.900 MHz FM 1200-baud Manchester FSK (reserved)
145.920 MHz FM VOICE
145.940 MHz FM 1200-baud Manchester FSK (reserved)
145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink: 437.026 MHz USB VOICE
(1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink: 145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909

Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink: 145.8500 MHz MFSK 1200 BPS
Uplink: 145.8700 MHz MFSK 1200 BPS
Uplink: 145.8900 MHz MFSK 1200 BPS
Uplink: 145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.8500 - 145.9000 MHz SSB/CW
Downlink 29.4000 - 29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====

AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink: 29.4500 - 29.5500 MHz SSB/CW
Beacons: 29.450 MHz
435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink: 145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB

Beacon 1: 29.352 MHz (intermittent)
Beacon 2: 29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-314.S4
WSR 314 Part 4 11/10/2011

AMSAT NEWS SERVICE BULLETIN 314.S4
FROM AMSAT HQ SILVER SPRING, MD, November 10, 2011
TO ALL RADIO AMATEURS
BID: $WSR-314.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

CAERUS
Catalog Number:
Launch Date: December 08, 2010 15:43:00 UTC
Launch site: Kennedy Space Center, Titusville, Florida, USA

Status: Re-entered December 22, 2010

Uplink:
Downlink: 437.600 MHz 1k2 AX.25

Beacon: 437.600 MHz CW

Callsign: KJ6FIX

URL:
http://www2.isi.edu/research/prj-serc/prj-serc_projects/prj-serc_projects-8.
htm

IARU coordination status page:

[11102011]
=====
CO-56 CUTE-1.7 + APD

Catalog number: 28941
Launch date: February 21, 2006

Status: Re-entered
Re-entered: October 25, 2009

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=56
[09062010]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 437.325 MHz 9k6 GMSK
437.325 MHz CW 20wpm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=117
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 436.250 MHz 9k6 FHSS
[11112009]
=====
Pollux
Catalog Number: 35693
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=139
[09062010]
=====
Castor (ANDE-2)
Catalog Number: 35694
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=144
[09062010]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=59
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25

Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Re-Entered
Re-entered date: August 8, 2010

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[08082010]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at}amsat.org
NNNN
/EX

154. ANS-317 AMSAT News Service Weekly Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2011-11-13 14:32:38 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <000901cca211$140c5cc0$3c251640$@net>
Source record: 280
Cross-posted to: rec.radio.amateur.space,rec.radio.info

AMSAT NEWS SERVICE
ANS-317

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* 2011 AMSAT Symposium Wrap Up
* This Week 50 Years Ago: OSCAR 1 Announcement
* UKube-1 Final Design Approved
* Strong Signals Received From Explorer-1 Prime Cubesat
* ESA Sponsors Students to Attend the European CubeSat Symposium
* Satellite Shorts From All Over
* ARISS Status - 7 November 2011

SB SAT @ AMSAT $ANS-317.01
2011 AMSAT Symposium Wrap Up

AMSAT News Service Bulletin 317.01
From AMSAT HQ SILVER SPRING, MD.
November 13, 2011
To All RADIO AMATEURS
BID: $ANS-317.01

2011 Symposium Proceedings in Stock in AMSAT Store

AMSAT Online Store Manager, Bruce Paige, KK5DO has added the Proceedings of the AMSAT-NA 29th Space Symposium and AMSAT-NA Annual Meeting to the AMSAT online store in the Publications Department:

http://www.amsat-na.com/store/item.php?id=100190

If you were unable to attend the Symposium, this is your chance to get a copy of the Proceedings. Copies are limited and available on a first-come, first-served basis. Cost is $25.00.

Symposium Media Post Processing

Gould Smith, WA4SXM is writing an article for the Journal about

the 2011 Symposium. Please email Gould any photos or links to
your online image storage to include in the article to
wa4sxm@amsat.org.

Dan Schultz, N8FGV is requesting help from someone with professional
grade sound editing software who is willing to invest a few hours in
a project of importance to AMSAT's historical archives. Please contact
Dan if you can help.: n8fgv@amsat.org.

[ANS thanks the 2011 Symposium Committee for the above information]

/EX

SB SAT @ AMSAT $ANS-317.02
This Week 50 Years Ago: OSCAR 1 Announcement

AMSAT News Service Bulletin 317.02
From AMSAT HQ SILVER SPRING, MD.
November 13, 2011
To All RADIO AMATEURS
BID: $ANS-317.02

The AMSAT News Service is re-running the Project OSCAR Newsletters
to commemorate the 50th anniversary of OSCAR 1. During the November/
December 2011 time frame you will be able to share the excitement of
the launch campaign that started it all 50 years ago.

The Newsletters were hand-typed back in 1961. Thanks to Don Ferguson,
KD6IRE for scanning the original documents announcing OSCAR 1.

Project OSCAR Newsletter November 15, 1961 at 1345 PST

First News Release,
U. S. RADIO AMATEURS T0 LAUNCH "PIGGY-BACK" SATELLITE

SUNNYVALE, CALIF. -- A hitch-hiking radio transmitter that will
speak to thousands of amateur radio operators throughout the world
is scheduled to be launched into space orbit next month, announced
the American Radio Relay League.

Weighing only 10 pounds, the satellite has been designed, built and
tested by a group of California (Peninsula) radio amateurs organized
as the Project Oscar Association of the League.

"OSCAR" stands for Orbital Satellite Carrying Amateur Radio. The
radio "ham's" transmitter beacon will be carried into space aboard
a scheduled space vehicle and will radiate signals in a world-wide
amateur frequency band of 2-meters, radio amateur M. C. Towns, Jr.
(Saratoga, Calif.) announced today. Transportation into space will
be provided by an Air Force vehicle to be launched 'from Vandenberg
Air Force Base, Calif.

Once in orbit, the Air Force vehicle will "kick away" the piggy-back radio amateur satellite, leaving it to follow its own course around the earth. The mother satellite will then continue to perform the experiments for which it was intended. Radio Amateur Towns, the Oscar Association Chairman, stressed that Project Oscar "is a serious, civilian, non-commercial effort to obtain information from outer space, and to introduce radio amateurs and lay scientists to new concepts in outer space communication.

"This miniature radio transmitter will be tracked and observed by radio amateurs and all interested observers throughout the world. "It will serve to instruct the radio amateur in the art of observing and tracking a moving space object. In addition, the mass of data gained from world-wide observations will provide information unobtainable by any other means.

"There are an estimated 300,000 licensed radio amateurs in the world, and the American Radio Relay League hopes a large number of these hobbyists will participate in the forthcoming experiments."

Towns noted that the radio amateur has, in the past, been a pioneer in various fields of radio communication, and that hundreds of U. S. radio amateurs are now engaged in space research and other space activity.

The 10-pound Oscar satellite consists of a low-power beacon transmitter contained in a rectangular metal casing about a foot long. It will send out a continuous Morse code signal of the letters H-I, four dots followed by two dots. Later satellites proposed to be built by the Oscar Association may both receive and transmit amateur signals.

As soon as this transmitter is in orbit, notification will be flashed to radio amateurs throughout the world by the American Radio Relay League, the international organization of radio amateurs which is sponsoring and cooperating in the project. "Radio propagation, Heaviside layer refraction, antenna efficiency and other data can be gathered and correlated from thousands of points over the world's surface," Towns said.

"The cause of good will," Towns continued, "will be served in that radio amateurs, located in virtually every country of the world, would have a common amateur interest in observing and tracking their own satellite, and in exchanging scientific information relative to improved equipment for receiving the satellite signals."

The Oscar transmitter is designed to operate on a frequency of 145 megacycles and can be heard by home experimenters having simple receiving equipment, Towns said. "Cooperation in the forthcoming tests is invited from any interested party," the Oscar Chairman stated, pointing out that support has already been contributed by the Air Force and numerous private concerns interested in furthering communication knowledge, and entirely on a no-cost basis of lending a helping hand to the amateurs in their own project.

The radio amateur satellite idea originated in 1959 with a Los Angeles amateur operator, Don Stoner, who suggested that radio amateurs had the technical know-how to build their own satellite if someone only had the vehicle to carry it into space. He, along with radio amateur Fred Hicks, of Campbell, California, and other radio "hams" kept the idea alive and formed the Project Oscar Association. The idea spread among radio clubs of the Los Angeles and San Francisco area and gathered support from radio amateurs nation-wide, including the radio amateur organization, the American Radio Relay League.

Radio "ham" Nicholas K. Marshall, technical director of the Oscar program, noted that the soon-to-be-launched satellite is but a first step in the overall Oscar concept.

"Later satellites to be built by the Oscar group will perhaps receive and transmit amateur test signals for specific space experiments," he said. Marshall noted that there are approximately 12,000 radio amateurs in the Soviet Union, and that the Oscar Association hopes to receive tracking data from some of them also.

[ANS thanks Don Ferguson, KD6IRE and Project OSCAR for the above information]

/EX

SB SAT @ AMSAT $ANS-317.03
UKube-1 Final Design Approved

AMSAT News Service Bulletin 317.03
From AMSAT HQ SILVER SPRING, MD.
November 13, 2011
To All RADIO AMATEURS
BID: $ANS-317.03

On November 8 AMSAT-UK posted the news that the UK space Agency and Astrium have approved the final design of UKube-1 - the UK's first CubeSat mission. The full story can be read at:
http://www.uk.amsat.org/2011/11/08/ukube-1-final-design-approved/

On November 3-4 a young team of engineers from Clyde Space presented their final design to a team of experts for the Critical Design Review (CDR) - the typical 'gateway' for space missions to proceed into the flight build and implementation phase.

The CDR for Ukube-1 thus marks an important point in the development of the mission, establishing the robustness of the design, the level of technical risk and the schedule/resourcing for the completion of all the tasks to build the flight spacecraft.

At the CDR, the review panel scrutinized the design in detail to ensure it was sufficiently mature for flight. Key areas of focus included the structure and mechanisms, the communications system, the on board software and processing, the attitude control system and power generation.

At the end of the meeting the review board concluded that Ukube-1 had successfully passed CDR.

The next stage is the implementation of the mission that will lead to a launch on a Russian Dneper rocket (ex ICBM converted for small satellite launches) towards the end of 2012.

More on the aims and objectives of Ukube-1 can be found on the UK Space Agency website:
http://www.bis.gov.uk/ukspaceagency/missions/ukube-pilot-programme

The UK Space Agency's pilot programme to design and launch a CubeSat, a miniature cube-shaped satellite that will allow the UK to test cutting-edge new technologies in space. In March 2011 four payloads were finally selected to fly on UKube-1. These will be integrated onto the spacecraft, which measures just 10cm x 10cm x 34cm, by Clyde Space. In addition UKube-1 will fly FunCube, an educational payload provided by AMSAT-UK, with the goal of enthusing and education young people about space, electronics, physics and radio.

[ANS thanks AMSAT-UK for the above information]

/EX

SB SAT @ AMSAT $ANS-317.04
Strong Signals Received From Explorer-1 Prime Cubesat

AMSAT News Service Bulletin 317.04
From AMSAT HQ SILVER SPRING, MD.
November 13, 2011
To All RADIO AMATEURS
BID: $ANS-317.04

Montana State University built the Explorer-1 [Prime] to replicate the scientific mission of the Explorer-1 mission which was launched on Jan. 31, 1958, and detected the existence of a band of energetic charged particles held in place by the Earth's magnetic field. The band was named the Van Allen Radiation Belt after the late James Van Allen, who directed the design and creation of instruments on the original Explorer-1 satellite.

Satellite: Explorer-1[PRIME] Flight Unit 2
Downlink Freq: 437.505 MHz
EIRP: -0.7dBW
Modulation Scheme: Non-Coherent FSK
Protocol: KISS Custom
Baud Rate: 1200
http://ssel.montana.edu/e1p/

Nader ST2NH added an article to his blog describing how to receive the 437.505 MHz LSB data telemetry from Explorer-1[PRIME].

Nader describes how to set up MiXW and the E-1P Telemetry Decoder software: http://tinyurl.com/cwvuwov (blogspot.com)

This page includes the link to download the E1-P software from
Montana State University.

Nader posted his video video showing reception of an E-1P pass at:
http://www.youtube.com/watch?feature=player_embedded&v=7S5CMwFlxeo

ST2NH Blog with all of Nader's articles:
http://st2nh-blogger.blogspot.com/

ST2NH YouTube channel showing several cubesat decoding passes:
http://www.youtube.com/user/st2nh/

Mike Rupprecht's DK3WN SatBlog has an article about his experience
in receiving and decoding E1-P, see:
http://www.dk3wn.info/p/?p=23528

[ANS thanks Nader, ST2NH and Mike, DK3WN for the above information]

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SB SAT @ AMSAT $ANS-317.05
ESA Sponsors Students to Attend the European CubeSat Symposium

AMSAT News Service Bulletin 317.05
From AMSAT HQ SILVER SPRING, MD.
November 13, 2011
To All RADIO AMATEURS
BID: $ANS-317.05

As part of the ESA Conference Opportunities for Sponsored Students
(ECOSS) Programme, the ESA Education Office is pleased to be able
to offer sponsorship to European students interested in attending
the European CubeSat Symposium (30 Jan - 1 Feb 2012, Brussels).
Highly qualified full-time students from ESA Member or Cooperating
States are encouraged to apply for ESA Sponsorship.

Students selected by ESA's Education Office will be reimbursed their
conference registration fee and up to a maximum of 300 Euro in tra-
vel and accommodation expenses. Sponsorship will be in the form of
a single reimbursement after the conference.

Before applying students must visit the conferences page of the
ESA Education Portal (www.esa.int/education>Conferences) and:

+ Check their eligibility for the programme under the "Sponsorship
Conditions" link.
+ Familiarize themselves with the content of the "How to Apply" link.

To apply, please visit ESA Education registration system:
http://www.joinspace.org

The deadline for sponsorship applications is January 4th 2012.

The deadline for submitting abstracts is postponed to 11 Nov 2011
for students only. Student who submitted abstracts before can also
apply for ESA sponsorship.

Check http://www.vki.ac.be/CubeSatSymposium/ for details.

[ANS thanks Graham Shirville, G3VZV for the above information]

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SB SAT @ AMSAT $ANS-317.06
Satellite Shorts From All Over

AMSAT News Service Bulletin 317.06
From AMSAT HQ SILVER SPRING, MD.
November 13, 2011
To All RADIO AMATEURS
BID: $ANS-317.06

+ Symmetricom announced a mass-produced Chip Scale Atomic Clock oscillator which maintans atomic clock accuracy and stability. More information at:
http://www.symmetricom.com/products/quantum-atomic-oscillators/

+ Christophe has produced a handy chart showing the CubeSat UHF downlink frequencies.
http://cubesat.free.fr/IMG//pdf/Cubesat_-_frequence_bande_U.pdf

+ In an effort to help increase interest in satellites, a new award has been created for working five (5) different hams in the EM55 grid. You do not have to be in your home grid to count the stations worked. There are several satellite ready hams in EM55: WA4NVM, WA4HFN, WB4LHD, WA4OVO, KI4OTG, KD4NOQ, KJ4BIX, AJ4KF, W5KUB, N4MGT AA4HV K4FEG. Send your log to WA4NVM or WA4HFN for checking, along with your current mailing address. The award is free and should any donations be sent, they will be forwarded to AMSAT along with your call and name. This award is effective for contacts made beginning on 1 June 2011.

+ The Super Sensitive High Definition TV, or SS-HDTV, camera on the space station can document new and more detailed footage of the dynamic interactions that take place in the area between the Earths' atmosphere and the vacuum of space, known as the cosmic shore. Night photography now shows more detail than previously possible. JAXA and NHK posted a video of a night time ISS pass over Japan:
http://www.youtube.com/watch?v=82vXwLdqNzU&feature=related

[ANS thanks everyone for the above information]

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SB SAT @ AMSAT $ANS-317.07
ARISS Status - 7 November 2011

AMSAT News Service Bulletin 317.07
From AMSAT HQ SILVER SPRING, MD.
November 13, 2011
To All RADIO AMATEURS
BID: $ANS-317.07

1. Swiss Students Speak with Astronaut Aboard ISS

On Monday, October 31, students attending Kantonsschule Zug in Zug, Switzerland connected with Astronaut Mike Fossum, KF5AQG on the ISS via Amateur Radio on the International Space Station (ARISS). An audience of 600 was on hand to witness the contact and watched as 8 students got in 16 questions before the ISS went over the horizon. The contact highlighted lessons on gravity, orbits, the ISS and its flight path, as well as electromagnetic waves and amateur radio. This ARISS event was held in celebration of the school's 150th anniversary. Media coverage included two television stations and one radio station.

2. Californian Students Radio ISS Astronaut

San Diego, California students from Sundance Elementary School participated in an Amateur Radio on the International Space Station (ARISS) contact on Tuesday, November 1. Astronaut Mike Fossum, KF5AQG answered questions about the ISS mission, space and how space affects the human body. The contact was integrated into lesson plans about radios, radio waves, space and space-related topics. The local ham radio club gave presentations to the youth. Sign On San Diego covered the event in an article:
http://www.signonsandiego.com/news/2011/nov/04/poway-students-connect-astronaut/

[ANS thanks Carol, KB3LKI, for the above information]

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In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

155. Weekly Highlights of Solar and Geomagnetic Activity, 07 - 13 November 2011

Newsgroup: rec.radio.amateur.space
Date: 2011-11-15 22:30:17 UTC
From: SWPC.Webmaster@noaa.gov
Message-ID: <20111115223002.0917133C8E@panix2.panix.com>
Source record: 281
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.info

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:Product: Weekly Highlights and Forecasts
:Issued: 2011 Nov 15 2044 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
# Weekly Highlights and Forecasts
#
Highlights of Solar and Geomagnetic Activity
07 - 13 November 2011

Solar activity was at low to moderate levels. Activity began at low
levels on 07 November, although Regions 1339 (N19E45, L=102,
class/area Fkc/1540 on 04 November) and 1338 (S=14, L=121,
class/area Ehi/375 on 03 November) both exhibited spot areal
coverage growth. Late on 07 November, a filament channel eruption
was observed in SDO/AIA imagery beginning around 07/2232Z. LASCO C2
imagery first indicated a CME liftoff from the NW limb at 07/2348Z.
Activity remained at low levels on 08 November, as Regions 1339 and
1338 both started to decay and simplify magnetically. On 09
November, activity increased to moderate levels when a long duration
M1 flare occurred at 09/1335Z. Associated with this event were a
Type II radio sweep with an estimated shock velocity of 750 km/s and
an Earth directed full-halo CME, visible in LASCO C2 imagery at
09/1336Z. Activity decreased to low levels on 10 November with the
largest event of the day being a C6/1f flare at 10/1831Z. Region
1339 remained the largest region on the disk but continued to decay.
On 11 November, activity remained at low levels with Region 1344
(S19, L=101, class/area Dai/200 on 12 November) producing a long
duration C4/Sf flare at 11/0705Z with an associated partial-halo
CME. The CME had an estimated plane-of-sky speed of 825 km/s, based
on SOHO/LASCO C2 images, and appeared to have a slight earth
directed component. On 12 November, activity remained at low levels
with occasional C-class flares. Regions 1339 and 1338 continued to
decay while Region 1344 continued to increase in magnetic
complexity, areal coverage, and total spot count before stabilizing
on 13 November

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at
normal levels throughout the period.
```

Geomagnetic field activity ranged from quiet to minor storm levels. The period began under quiet to unsettled conditons on 07 November. Activity increased on 08 November to quiet to unsettled conditions with isolated periods of active to minor storm levels at high latitudes. Mostly quiet levels returned on 09 November and continued through 13 November.

Forecast of Solar and Geomagnetic Activity
16 November - 12 December 2011

Solar activity is expected to be at predominately low levels with a chance for M-class activity through the period. Old Region 1339 (N19, L=102) returns on 27 November bringing an increased probability of M-class activity and a slight chance for an X-class event.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at background levels.

Geomagnetic field activity is expected to be quiet for the greater portion of the forecast period. Unsettled conditions are possible on 26-27 November and again on 09-10 December with the return of recurrent coronal hole high speed streams.

156. ANS-324 AMSAT News Service Weekly Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2011-11-22 15:41:54 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <001101cca92d$3ddd2f70$b9978e50$@net>
Source record: 282
Cross-posted to: rec.radio.amateur.space,rec.radio.info

AMSAT NEWS SERVICE
ANS-324

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* Radio Ham Blasts Off to Space Station
* CubeSat Keplerian Elements Under Analysis
* Arizona Centennial Special Event Plans Satellite Operation
* Amateur Radio Assistance Requested: ISS Plasma Thrust Shadow Experiment
* Ultimate HEO: Voyager 2 Completes Switch to Backup Thruster Set
* AMSAT Submits Proposal to NASA for Fox-1 Satellite
* 70cm Amateur Station Active on Packet from ISS Columbus Module
* ARISS Status - 14 November 2011

SB SAT @ AMSAT $ANS-324.01
Radio Ham Blasts Off to Space Station

AMSAT News Service Bulletin 324.01
>From AMSAT HQ SILVER SPRING, MD.
November 20, 2011
To All RADIO AMATEURS
BID: $ANS-324.01

Southgate ARC News web this week carried a story about Radio Amateur Daniel Burbank KC5ZSX aboard the Soyuz launch on November 14.

With him on Soyuz TMA-22 are commander Anton Shkaplerov and engineer Anatoly Ivanishin. They were meant to have launched on September 22, but the flight was delayed after an unmanned Progress cargo ship suffered a third stage malfunction during launch Aug. 24 and failed to reach orbit. The third stage of the cargo craft's rocket is virtually identical to the one used in the manned version.

They docked with the ISS on Wednesday, November 16. All the current ISS crew are Radio Amateurs - Expedition 29 commander Michael Fossum KF5AQG, Sergei Volkov U4MIR and Satoshi Furukawa KE5DAW.

Daniel Burbank KC5ZSX will be the Expedition 30 commander and will become the only Radio Amateur on the ISS when KF5AQG, U4MIR and KE5DAW return to Earth on November 21,

A summary of the mission can be found on-line at:
Space Flight Now - Expedition 29 Status
http://spaceflightnow.com/station/exp29/status.html

[ANS thanks Southgate ARC News for the above information]

/EX

SB SAT @ AMSAT $ANS-324.02
CubeSat Keplerian Elements Under Analysis

AMSAT News Service Bulletin 324.02
>From AMSAT HQ SILVER SPRING, MD.
November 20, 2011
To All RADIO AMATEURS
BID: $ANS-324.02

Ray Hoad, WA5QGD, AMSAT Keeper of the Keps this week answered the question of which Keplerian Elements match each of the cubesats launched on October 28, 2011. Ray commented, "The identification of the satellites continues. Simply put, we don't have enough separation to make a positive identification."

Nico Janssen, PA0DLO, has been analyzing various aspects of the satellite group (grouping, radar cross section, and order of launch from rocket body). He concludes that we need more time and separation to be sure. Nico's best educated guess at this time is as follows:

+ Explorer 1 Prime is Object G, Cat # 37855
+ Aubiesat (AO-71) and M-cubed, are in the same group as Objects E and F.
+ The two DICE satellites (commercial, non amateur) are Objects C and D.
+ RAX2 is Object B, Cat # 37850.

Nico reminds us that this is a best guess and only time will tell who is who. Thanks Nico for sharing your thoughts with us.

Here are this weeks KEPs for the latest Cubesat flock:

OBJECTB
1 37850U 11061B 11314.31682443 .00000489 00000-0 51357-4 0 00169
2 37850 101.7053 249.9601 0255846 255.5306 101.7516 14.77614148001891
OBJECTC
1 37851U 11061C 11317.83772545 .00009599 00000-0 78565-3 0 00253
2 37851 101.7037 255.0640 0254660 246.5170 110.9070 14.77729084002420
OBJECTD
1 37852U 11061D 11318.85323228 .00010618 00000-0 86612-3 0 174
2 37852 101.7048 256.5342 0254778 243.6020 113.8822 14.77773735 2564
OBJECTE

1 37853U 11061E 11317.83714479 .00010430 00000-0 85168-3 0 00441
2 37853 101.6978 255.0557 0254457 246.6876 110.7358 14.77795553002421
OBJECTF
1 37854U 11061F 11318.51214050 .00011655 00000-0 93205-3 0 203
2 37854 101.7001 256.0511 0257496 245.1384 112.2875 14.78001563 2507
OBJECTG
1 37855U 11061G 11318.85081525 .00010458 00000-0 84381-3 0 171
2 37855 101.7008 256.5373 0255959 243.3435 114.1347 14.77981238 2550

[ANS thanks Ray Hoad, WA5QGD, for the above information]

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SB SAT @ AMSAT $ANS-324.03
Arizona Centennial Special Event Plans Satellite Operation

AMSAT News Service Bulletin 324.03
>From AMSAT HQ SILVER SPRING, MD.
November 20, 2011
To All RADIO AMATEURS
BID: $ANS-324.03

The Central Arizona DX Association (CADXA) is very pleased to
announce their special event operation in celebration of the
Arizona Centennial during the week of February 13-19th, 2012.

They will be using the callsign of the late Senior Senator,
and Arizona native son, Barry M. Goldwater, K7UGA.

Individual CADXA members will be operating from their home sta-
tions located throughout Arizona during that week using the call-
sign K7UGA.

However, only special operating locations from Tucson, Prescott
and Phoenix will be on the air celebrating the 100th anniversary
on Tuesday, February 14th, 2012.

Operations will be on all amateur bands (160-2 meters); and will
be using CW, SSB, RTTY, PSK31 and Satellite modes.

This CADXA special event operation has proudly received recogni-
tion from the 2012 Arizona Centennial Foundation as a sanctioned
"Special Event"; and from the Arizona Historical Advisory Commis-
sion as an official "Centennial Legacy Project".

All QSL requests go to Bob Davies - K7BHM (qrz.com) with an SASE.

For more details, please go to the CADXA Web site at:
http://www.cadxa.org

[ANS thanks CADXA and Southgate ARC News for the above information]

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SB SAT @ AMSAT $ANS-324.04
Amateur Radio Assistance Requested: ISS Plasma Thrust Shadow Experiment

AMSAT News Service Bulletin 324.04
>From AMSAT HQ SILVER SPRING, MD.
November 20, 2011
To All RADIO AMATEURS
BID: $ANS-324.04

The Central Research Institute of Machine Building (TSNIIMASH) in Russia is conducting a series of space plasma experiments in order to evaluate the shape of previously observed "dead" zone, or shadowing due to the firing of an onboard arcjet plasma source.

Radio Amateurs are invited to participate in the Space plasma experiment "Shadow" onboard International Space Station (ISS). Integration of Electric Thrust onboard a spacecraft poses a certain set of problems including electromagnetic compatibility of ET. One matter of interest is that highly ionized exhaust plumes of ET may scatter RF-signals producing large "dead" zone for communications.

This plasma screening effect should be thoroughly studied before electric thrusters become standard onboard equipment. The investigation will help designers of future electrically propelled spacecraft to minimize the hazard of communication disruption by ET plasma plumes.

The Central Research Institute has proposed an experiment using the worldwide distribution of radio amateurs to receive the VHF packet downlink (145.825 MHz) from a new plasma space experiment on the International Space Station.

The amateur packet radio technology in the SpEx "Shadow" as proposed by astronaut Alexander Kalery, will use the AX25 packets transmitted by "Master Stations" and reported by receiving amateur radio ground stations to track the effect of the plasma shadow.

The SpEx experiment will be enabled on the following schedule:

SpEX Time On	SpEX Time Off
November 25 1650 UTC	November 28 0825 UTC
December 2 1650 UTC	December 5 0825 UTC

The master beacon stations for Europe, Asia, North America, and Australia can be found at:
http://tinyurl.com/84nvl72 (knts.tsniimash.ru)

The main web page for the SpEx project can be found at:
http://knts.tsniimash.ru/Shadow/en/Overview.aspx
This page contains a detailed description of the experiment and instructions for submitting your signal reports.

An example of the SpEx packets received by Mike Rupprecht, DK3WN can be seen at: http://www.dk3wn.info/p/?p#866

[ANS thanks TSNIIMASH for the above information]

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SB SAT @ AMSAT $ANS-324.05
Ultimate HEO: Voyager 2 Completes Switch to Backup Thruster Set

AMSAT News Service Bulletin 324.05
>From AMSAT HQ SILVER SPRING, MD.
November 20, 2011
To All RADIO AMATEURS
BID: $ANS-324.05

This week Space-Travel.com reported that NASA's Voyager 2 has successfully switched to the backup set of thrusters that controls the roll of the spacecraft.

Deep Space Network personnel sent commands to the spacecraft to make the change on Nov. 4 and received confirmation that the switch has been made.

Voyager 1 and Voyager 2 are each equipped with six sets, or pairs, of thrusters to control the pitch, yaw and roll motions of the spacecraft.

These include three pairs of primary thrusters and three backup, or redundant, pairs. Both spacecraft are now using all three sets of their backup thrusters.

Voyager 2 is currently located about 9 billion miles (14 billion kilometers) from Earth in the heliosheath - the outermost layer of the heliosphere where the solar wind, which streams out from the sun, is slowed by the pressure of interstellar gas.

The Voyagers were built by NASA's Jet Propulsion Laboratory in Pasadena, Calif., which continues to operate both spacecraft. JPL is a division of the California Institute of Technology in Pasadena.

The Voyager missions are a part of the NASA Heliophysics System Observatory, sponsored by the Heliophysics Division of the Science Mission Directorate. The original story is published at: http://tinyurl.com/cquqws6 (space-travel.com)

[ANS thanks space-travel.com for the above information]

/EX

SB SAT @ AMSAT $ANS-324.06
AMSAT Submits Proposal to NASA for Fox-1 Satellite

AMSAT News Service Bulletin 324.06
>From AMSAT HQ SILVER SPRING, MD.
November 20, 2011
To All RADIO AMATEURS
BID: $ANS-324.06

On Monday, Nov. 14, AMSAT submitted a proposal to NASA for their CubeSat Launch Initiative, also known as the "Educational Launch of NanoSat" (ELaNa) program. NASA selects projects that they deem to have merit in support of their strategic and educational goals. Projects that are selected will be able to enter into a collaboration agreement where NASA will cover the integration and launch costs of the satellite.

AMSAT, working with ARRL, highlighted the educational merit of the project including the incorporation of Fox-1 into the ARRL Teacher Institute seminars. ARRL also provided a letter of support for the project that was a key component of our proposal.

The Clay Center for Science and Technology at the Dexter and Southfield schools in Brookline MA, also provided a letter of support that was an important part of our proposal. The Clay Center noted that they use AMSAT satellites such as ARISSat-1 in their educational activities for K-12 students and that they look forward to making use of Fox-1.

The completed proposal, at 159 total pages, required a significant effort that was all done by volunteers. NASA will select from all of the submissions and announce the winning projects by January 30, 2012.

[ANS thanks AMSAT Vice-President of Engineering, Tony Monteiro, AA2TX for the above information]

/EX

SB SAT @ AMSAT $ANS-324.07
70cm Amateur Station Active on Packet from ISS Columbus Module

AMSAT News Service Bulletin 324.07
>From AMSAT HQ SILVER SPRING, MD.
November 20, 2011
To All RADIO AMATEURS
BID: $ANS-324.07

The amateur radio station located in the Columbus module is currently operational with the UHF Ericsson transceiver and packet system using the frequency of 437.550 MHz. To utilize the packet system, operators need to set the UNPROTO path to ARISS (the id is RS0ISS) for digi relay or they may connect to the BBS using the callsign RS0ISS-1. The packet beacon is set for 2 minute intervals so it may not appear to be active over many parts of the world but keep listening and mind the Doppler shift (+ or - 10 KHz).

[ANS thanks Kenneth Ransom, N5VHO for the above information]

/EX

SB SAT @ AMSAT $ANS-324.08
ARISS Status - 14 November 2011

AMSAT News Service Bulletin 324.08
>From AMSAT HQ SILVER SPRING, MD.
November 20, 2011
To All RADIO AMATEURS
BID: $ANS-324.08

1. School Contacts

An Amateur Radio on the International Space Station (ARISS) contact was successful for A.S.J. Memorial High School, Thetford Mines, Qu&#65533;bec, Canada on Monday, November 14 at 15:41 UTC. The school formed a space club and students were taught about the ISS, radio equipment and radio protocol.

Johnson Space Center (JSC) Education in Houston, Texas completed a scheduled contact for an Amateur Radio on the International Space Station (ARISS) contact on Tuesday, November 15 at 15:39 UTC via station VK5ZAI in Australia. Interns and co-ops at JSC participating in the contact learned about amateur radio technology. Teaching From Space (TFS), a NASA Education office, will help facilitate the event. TFS promotes learning opportunities and builds partnerships with the education community using the unique environment of space and NASA's human spaceflight program. The students participating in the contact come from the Space Grant Program, the University Research Centers Program, the Undergraduate Student Research Project, and JSC's internal co-op program operated through the JSC Human Resources Department. Each of these programs provides students the opportunity to have hands-on, real-life, career-related experiences that challenge, inspire, and provide practical application that complements and expands upon the students' academic education.

2. Hospitalized Students Participate in ARISS Contact

On Wednesday, November 9, an Amateur Radio on the International Space Station (ARISS) contact was held between children at the Rehabilitationszentrum f&#65533;r Kinder und Jugendliche in Affoltern am Albis,
Switzerland and ISS Astronaut Satoshi Furukawa, KE5DAW. The venue of this contact was a hospital school that is attended by children during their rehabilitation. Furukawa was able to answer 13 questions from 9 students during the event, which was attended by approximately 50 people. The contact had a great impact on the students. For example, one 14 year old, suffering from a cerebral hemorrhage and unable to speak normally, made a tremendous effort to practice his questions for the contact. Through this event, students learned about space, satellites, radio waves and propagation of radio waves.

3. New York Students Contact ISS

Students attending Donald P. Sutherland School in Nassau, New York took part in a successful Amateur Radio on the International Space Station (ARISS) contact on Thursday, November 10. The children were able to get in all of their questions during the pass, with time for a goodbye to

Astronaut Mike Fossum. The contact was integrated into Language Arts, Mathematics and Technology, Science, Social Studies, Music, Art, Physical Education, and Character Education. Web sites such as NASA Kids and the NASA Digital Learning Network were also utilized by teachers and students to prepare for this event. WNYT posted video and a story, "Nassau elementary students talk to an astronaut" at: http://thegreenbushes.wnyt.com/news/news/93797-nassau-elementary-students-talk-astronaut

4. ARISS Contact Integrated into EduSat Project

Bari, Italy students attending I.I.S.S. "G. Marconi" School participated in an Amateur Radio on the International Space Station (ARISS) contact on Saturday, November 12 via station IK1SLD in Italy. Astronaut Mike Fossum, KF5AQG fielded 10 questions put to him by the students with enough time left to exchange greetings. Local and regional media covered the event. "G. Marconi" is a scientific high school that specializes in technology. More than 600 students are enrolled at the school and the ARI (Radioamateur Association of Bari) is a part of the ISS "Marconi" body. The Institute participates in the EduSat project, headed by ASI (Italian Space Agency) in collaboration with IMT - Ingegneria Marketing e Tecnologia (Italian SME). The ARISS contact was integrated into the EduSat project through which students are studying aerospace, space telecommunications and satellite subsystems.

5. ARISS Represented at AMSAT Symposium

AMSAT held its annual Space Symposium in San Jose, California on November 4-6. Dave Taylor, W8AAS (AMSAT-NA US Delegate to ARISS-I) reported to the Board of Directors on ARISS activities over the past year. He also presented a paper on "ARISS and Education" at the general meeting, on behalf of the paper's authors: Mark Steiner, K3MS, Rosalie White, K1STO, and Debbie Biggs.

ARISSat-1 was a popular topic, with 5 papers presented about topics including telemetry decoding, operations, and lessons learned. Lou McFadin, W5DID (ARISS hardware lead) talked about the "Fabrication, Integration and Testing of ARRISat-1".

A major thrust of the symposium was education and how AMSAT can (and must) provide a complete educational package for its satellites, both to encourage participation in amateur radio and to obtain affordable launch opportunities. AMSAT President Barry Baines, WD4ASW, made this point repeatedly. A number of papers also addressed education from various angles. Several AMSAT members attending the symposium formed a team to develop educational products targeted directly at national STEM requirements. They plan to have amateur radio and satellite activities that teachers can drop into their curriculum. They hope to have the first few of these available for use while ARISSat-1 is still operational, and then develop more for continuing use to benefit ARISS and future AMSAT satellites.

6. ARRL QST on ARISS

The American Radio Relay League (ARRL) covered ARISS in its December 2011 issue of QST. The "In Brief" column carried a short item about Astronaut Mike Fossum, KF5AQG, operating on the air while on-orbit during JOTA in October.

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Dee Interdonato, NB2F

157. Weekly Highlights of Solar and Geomagnetic Activity, 14 - 20 November 2011

Newsgroup: rec.radio.amateur.space
Date: 2011-11-22 22:30:06 UTC
From: SWPC.Webmaster@noaa.gov
Message-ID: <20111122223001.D481533C8E@panix2.panix.com>
Source record: 283
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.info

```
:Product: Weekly Highlights and Forecasts
:Issued: 2011 Nov 22 1901 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
# Weekly Highlights and Forecasts
#
Highlights of Solar and Geomagnetic Activity
14 - 20 November 2011

Solar activity has been at low to moderate levels. On November 14
solar activity was at low levels with a C5/Sf flare observed at
14/0930 UTC from Region 1348 (N20, L=088, class/area Dso/120 on 15
November) with an associated Type II radio sweep (estimated shock
velocity 610 km/s). Activity increased to moderate levels on
November 15 with three M-class flares. Region 1348 produced an M1/Sf
flare at 15/0912 UTC and an M1/1f flare at 15/2235 UTC, and Region
1346 (S18, L=339, class/area Dso/140 on 16 November) produced an
M1/Sf flare at 15/1243 UTC. From November 16-20, activity returned
to low levels with several Type II radio sweeps being reported. The
first of these (estimated velocity of 529 km/s) was possibly
associated with a C7 flare at 16/1505 UTC from Region 1348. Two Type
II radio sweeps occurred on November 17, one (estimated velocity of
456 km/s) associated with a C2 flare at 0133 UTC from Region 1346
and the other (estimated velocity of 558 km/s) associated with a
C6/Sf at 0727 UTC from Region 1346. The last Type II radio sweep of
the summary period (estimated velocity of 542 km/s) was associated
with a C1 flare at 19/0127 UTC from Region 1341 (N18, L=055,
class/area Dso/210 on 09 November). Several coronal mass ejections
(CMEs) were observed during the period but none were earthward
directed.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at
normal to moderate levels the entire period.

The geomagnetic field was quiet to unsettled. The period began with
quiet conditions. Activity levels increased to quiet to unsettled
for a brief time on 15 November, but soon returned to quiet levels
and remained there for the remainder of the period.

Forecast of Solar and Geomagnetic Activity
23 November - 19 December 2011
```

Solar activity is expected to be at predominately low levels through the period. There is a slight chance, however, for isolated M-class activity.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at normal to moderate levels the entire period.

The geomagnetic field is expected to be generally quiet for most of the outlook period, with the exception of 28 - 29 November when quiet to unsettled levels are expected due to a small, recurrent coronal hole high speed stream.

158. WSR-327 AMSAT Weekly Satellite Report

Newsgroup: rec.radio.amateur.space
Date: 2011-11-23 13:57:00 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <000c01cca9e7$ba726360$2f572a20$@net>
Source record: 284
Cross-posted to: rec.radio.amateur.space,rec.radio.info

```
This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-327.S1
WSR 327 Part 1 11/23/2011

AMSAT NEWS SERVICE BULLETIN 327.S1
FROM AMSAT HQ SILVER SPRING, MD, November 23, 2011
TO ALL RADIO AMATEURS
BID: $WSR-327.S1

ARISSat-1 (Radioskaf-b) (Kedr)
Catalog number: 37772
Launch date: August 03, 2011 1843z
Launch site: International Space Station

Status: Operational

Callsign: RS01S

Current Mode(s):
Linear Transponder: U/v
Uplink: 435.758 to 435.742 MHz CW/LSB
Downlink: 145.922 to 145.938 MHz CW/USB

FM Telemetry/SSTV/Messages/ID:
Downlink: 145.950 MHz FM

Telemetry/Beacon:
Downlink: 145.939 MHz CW1
145.919 MHz CW2
145.920 MHz 1k BPSK USB
145.920 MHz 400b BPSK USB

Official Webpage:http://www.amsat.org/amsat-new/ARISSat/ARISSat.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/informal_detail.php?serialnum=89
[08112011]
=====
SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009 1555z
```

Launch site: Baikonur, Kazakhstan

Status: Recovery

Callsign: ZS0SUM

Uplink: 145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=88
[09292011]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=68
[02092011]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05, 2005 0444z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.9360 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=30

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[02092011]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004 0745z
Launch site: Baikonur, Kazakhstan

Status: Semi-operational - IHU crash each eclipse

Current Mode(s):
Voice repeater: V/u
Uplink: 145.880 MHz FM
Downlink: 435.150 MHz FM

Telemetry: Recovery efforts
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.880 MHz FM
145.920 MHz FM
145.920 MHz FM - 67 Hz PL tone burst
1268.705 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.703 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=19
[06162011]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002 1700z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4
Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the re-
peater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
the 10 minute timer.
[02092011]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993 0140z
Launch site: Kourou, French Guiana

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[02092011]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974
Launch site: Vandenberg AFB, California, USA

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
145.972 MHz CW
435.100 MHz CW
2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02092011]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
Kourou, French Guiana
Uchinoura Space Center, Japan
Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - OFF
APRS - OFF
SSTV - OFF

Expedition 30 Crew (November 2011 - March 2012):
Commander: Dan Burbank KC5ZSX
Flight Engineer: Anton Shkaplerov
Flight Engineer: Anatoly Ivanishin
Flight Engineer:
Flight Engineer:
Flight Engineer:

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[11232011]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-327.S2
WSR 327 Part 2 11/23/2011

AMSAT NEWS SERVICE BULLETIN 327.S2
FROM AMSAT HQ SILVER SPRING, MD, November 23, 2011
TO ALL RADIO AMATEURS
BID: $WSR-327.S2

JUNGU
Catalog Number:

Launch Date: October 12, 2011 05:30:00 UTC
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink: 145.??? MHz 1k2 (mode?)
Downlink: 437.505 MHz 9k6 (mode?)

Beacon: 437.275 MHz 15 wpm (?) CW

Callsign:

URL: http://www.iitk.ac.in/me/jugnu/index.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=160
[11102011]
=====
SRMSAT
Catalog Number:
Launch Date: October 12, 2011 05:30:00 UTC
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink: 145.900 MHz 1k AX.25 (speed?)
Downlink: 437.500 MHz 2k4 AX.25

Beacon: 437.425 MHz 12 wpm CW

Callsign:

URL: http://srmsat.in/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=181
[11102011]
=====
E1P Explorer 1 [Prime] CubeSat (E1P-U2)
Catalog Number:
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink: 437.305 MHz (???)
Downlink: 437.505 MHz AX.25 (SSB?)

Beacon:

Callsign:

URL: http://ssel.montana.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=116

[11102011]
=====
M-Cubed
Catalog Number:
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink:
Downlink: 437.485 MHz AX.25

Beacon:

Callsign:

URL: http://umcubed.org/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=215
[11102011]
=====
RAX-2
Catalog Number:
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink:
Downlink: 437.345MHz 9k6 GMSK

Beacon:

Callsign:

URL: http://rax.engin.umich.edu//

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=221
[11102011]
=====
FO-71 AubieSat-1
Catalog Number:
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink:
Downlink: 437.475 MHz 1k2 AX.25

Beacon: 437.475 MHz CW

Callsign: KI4NQO

URL: http://www.space.auburn.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=148
[11102011]
=====
O/OREOS
Catalog Number: 37224
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.035 MHZ AX.25

Beacon:

Callsign:

URL: http://www.ooreos.org/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=146
[02092011]
=====
Rax-1 Radio Aurora Explorer
Catalog Number: 37223
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.505 MHz 9k6 GMSK

Beacon:

Callsign: RAX-1

URL: http://rax.engin.umich.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=165
[02092011]
=====
FO-69 Fastrac-1 Sara Lily
Catalog Number: 37227
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Operational

Uplink 1: 145.980 MHz 1k2 baud
Uplink 2: 145.825 MHz 1k2 baud
Downlink: 437.345 MHz 1k2 and 8k6 baud

Beacon: 437.435 MHz 1k2 AX.25

Callsign: Fast1

URL: http://fastrac.ae.utexas.edu/index.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=83
[07052011]
=====
FO-70 Fastrac-2 Emma
Catalog Number: 37380
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Operational

Uplink 1: 435.025 MHz 1k2 baud
Uplink 2: 437.435 MHz 9k6 baud
Downlink: 145.825 MHz

Beacon: 145.825 MHz 1k2 AX.25

Callsign: Fast2

URL: http://fastrac.ae.utexas.edu/index.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=84
[07052011]
=====
StudSat
Catalog Number: 36796
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink: 437.505MHz, 9600bps FSK
Downlink: 437.505MHz, 9600bps FSK
Beacon : 437.505MHz, 20bps ASK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=164
[02092011]
=====
TIsat-1
Catalog Number: 36799
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On orbit

Callsign: HB9DE

Uplink: 145.980MHz FM, AFSK
Downlink: 437.305MHz FM, AFSK
Beacon: 437.305MHz CW

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=118
[02092011]
=====
HO-68 HOPE-1 (CAS-1)(XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009 0231z
Launch site: Taiyuan Space Center, PRC

Status: Beacon only

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
145.9250 - 145.9750 MHz SSB/CW
145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
435.7650 - 435.7150 MHz SSB/CW
435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=108

For more information about XW-1 (CAS-1):
http://
[08112011]
=====
SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w): 437.5050MHz FSK 1k2bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=109
[02092011]
=====

UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
437.3850 MHz FSK 9k6bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=110
[02092011]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=113
[02092011]
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
Beacon(500mw): 436.000MHz GMSK 9k6bp
[02092011]
=====
CP-6
Catalog Number: 35003
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: Operational

Downlink: 437.365 MHz 1k2 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=121
[02092011]

=====
HAWKSAT 1
Catalog number: 35004
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: operational

Downlink: 437.345 MHz ?

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=105
[02092011]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: Operational

Downlink: 437.465 MHz 1k2 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=94
[02092011]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009 0115z
Launch Site: Satish Dhawan Space Centre, India

Status: ?

Downlink: 435.000 MHz
Uplink: 145.800 MHz

Telemetry: 137.400 MHz
[02092011]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon: 437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=101
[02092011]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: In Orbit

Downlink: 437.375 MHZ FSK9k6/CW
Beacon: 437.375 MHz FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[02092011]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
437.465 MHz FM/CW
Beacons: 437.305 MHz FM/CW
437.275 MHz FM/CW

Callsigns: JR5YBN
JR5YBO

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[02092011]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Downlink: 437.455 MHz AFSK/CW
Beacon: 437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[20092011]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon: 437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[02092011]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008 1520z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Curent Modes: Telemetry
Audio
Images

Downlinks: 435.315 MHz
435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02092011]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web
page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=46
[02092011]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=60
[02092011]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational ?

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL
=/satellites/status.php
[07052011]
=====
Compass-1

Catalog number: 32787
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Current Mode: dependant on last received command

Uplink: 145.980 MHz FM
Downlink: 437.275 Mhz CW
437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[06162011]
=====
CO-66 Seeds II
Catalog number:
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web
page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL
=/satellites/status.php
[02092011]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=72
[02092011]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=74
[02092011]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005 0652z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=37
[02092011]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003 1415z

Launch site: Plesetsk Missile and Space Complex, Russia

Status: ?????

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[02092011]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004 0745z
Launch site: Baikonur, Kazakhstan

Status: Semi-operational - IHU crash each eclipse

Current Mode(s):
Voice repeater: V/u
Uplink: 145.880 MHz FM
Downlink: 435.150 MHz FM

Telemetry: Recovery efforts
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.880 MHz FM
145.920 MHz FM
145.920 MHz FM - 67 Hz PL tone burst
1268.700 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.708 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP

L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=19
[06162011]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[02252011]
=====
CO-55 Cute-1.7+APD II
Catalog Number: 27844
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Current Mode: CW downlink worldwide
AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=78
[02092011]
=====
NO-44 PCSAT
Catalog number: 26931

Launch Date: September 30, 2001 0240z
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[02092011]
=====
RS-22 RADIO SPORT 22 (MOZHAYETS 4)
Catalog number: 27939
Launch Date: September 27, 2003 0612z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02092011]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990
Launch site: Kourou, French Guiana

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
145.860 MHz 1200-baud Manchester FSK
145.880 MHz 1200-baud Manchester FSK
145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[02092011]

=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984
Launch site: Vandenburg AFB, California, USA

Status: Operational ?

Current Mode: /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz
Mode-S Beacon: 2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[07052011]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
Kourou, French Guiana
Uchinoura Space Center, Japan
Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - OFF
APRS - OFF
SSTV - OFF

Expedition 30 Crew (November 2011 - March 2012):
Commander: Dan Burbank KC5ZSX
Flight Engineer: Anton Shkaplerov
Flight Engineer: Anatoly Ivanishin
Flight Engineer:
Flight Engineer:
Flight Engineer:

Available Modes and Frequencies:
Digital/APRS:
Worldwide packet uplink: 145.825 MHz FM 1k2
Worldwide packet downlink: 145.825 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM

Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
Packet Mailbox: RS0ISS-11
Digipeater callsign: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[11232011]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-327.S3
WSR 327 Part 3 11/23/2011

AMSAT NEWS SERVICE BULLETIN 327.S3
FROM AMSAT HQ SILVER SPRING, MD, November 23, 2011
TO ALL RADIO AMATEURS
BID: $WSR-327.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NANOSAIL-D
Catalog Number:
Ejection Date: January 17, 2011

Status: On orbit

Downlink: 437.270 MHz AX.25

URL: http://nanosaild.engr.scu.edu/dashboard.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=115
[01272011]
=====
CP4
Catalog Number: 31132
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=79
[09062010]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=76
[09062010]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=51
[09062010]
=====
NCUBE-2

Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.250

Official Website: http://www.ncube.no

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=24
[09062010]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink 2401.835 MHz 38k4 packet

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=54
[09062010]
=====
UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=53
[09062010]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842

Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks: 145.850 MHz
145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks

V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON General Beacon(GB) Middle Beacon(MB) Engineering Beacon(EB)
2 m none 145.898 MHz none
70cm 435.438 MHz 435.588 MHz 435.838 MHz
13cm(1) 2400.188 MHz 2400.338 MHz 2400.588 MHz
13cm(2) 2401.173 MHz 2401.323 MHz 2401.573 MHz
3cm 10450.975 MHz 10451.125 MHz 10451.375 MHz
1.5cm 24047.885 MHz 24048.035 MHz 24048.285 MHz
[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
145.890 FM
145.930 FM
1269.700 FM
1269.800 FM
1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[07172010]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink: 435.1380 MHz AFSK 1200 BPS
Downlink: 435.2060 MHz AFSK 1200 BPS
Uplink: 145.8150 MHz AFSK 1200 BPS
Uplink: 145.8350 MHz AFSK 1200 BPS
Uplink: 145.8550 MHz AFSK 1200 BPS
Uplink: 145.8750 MHz AFSK 1200 BPS
[06042009]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
145.870 MHz FM
145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[101432011]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks: 145.875 MHz FM 1200-baud
145.900 MHz FM 1200-baud
145.925 MHz FM 1200-baud
145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html

[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink: 435.0625 MHz FM 1k2bps AFSK
435.1125 MHz FM 1k2bps AFSK
435.1375 MHz FM 1k2bps AFSK
Downlink: 145.9750 MHz FM 1k2bps AFSK
2446.5025 MHz FM 1k2bps AFSK

Beacon: 2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink: 435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons: 435.795 MHz CW
435.910 MHz AX25

Voice Transponder:
Uplink: 145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks: 145.850 MHz
145.870 MHz
145.890 MHz
145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz

[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode: V/u

Uplink: 145.900 MHz FM 1200-baud Manchester FSK (reserved)
145.920 MHz FM VOICE
145.940 MHz FM 1200-baud Manchester FSK (reserved)
145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink: 437.026 MHz USB VOICE
(1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink: 145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909

Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink: 145.8500 MHz MFSK 1200 BPS
Uplink: 145.8700 MHz MFSK 1200 BPS
Uplink: 145.8900 MHz MFSK 1200 BPS
Uplink: 145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.8500 - 145.9000 MHz SSB/CW
Downlink 29.4000 - 29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====

AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink: 29.4500 - 29.5500 MHz SSB/CW
Beacons: 29.450 MHz
435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink: 145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB

Beacon 1: 29.352 MHz (intermittent)
Beacon 2: 29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-327.S4
WSR 327 Part 4 11/23/2011

AMSAT NEWS SERVICE BULLETIN 327.S4
FROM AMSAT HQ SILVER SPRING, MD, November 23, 2011
TO ALL RADIO AMATEURS
BID: $WSR-327.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

CAERUS
Catalog Number:
Launch Date: December 08, 2010 15:43:00 UTC
Launch site: Kennedy Space Center, Titusville, Florida, USA

Status: Re-entered December 22, 2010

Uplink:
Downlink: 437.600 MHz 1k2 AX.25

Beacon: 437.600 MHz CW

Callsign: KJ6FIX

URL:
http://www2.isi.edu/research/prj-serc/prj-serc_projects/prj-serc_projects-8.
htm

IARU coordination status page:

[11102011]
=====
CO-56 CUTE-1.7 + APD

Catalog number: 28941
Launch date: February 21, 2006

Status: Re-entered
Re-entered: October 25, 2009

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=56
[09062010]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 437.325 MHz 9k6 GMSK
437.325 MHz CW 20wpm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=117
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 436.250 MHz 9k6 FHSS
[11112009]
=====
Pollux
Catalog Number: 35693
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=139
[09062010]
=====
Castor (ANDE-2)
Catalog Number: 35694
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=144
[09062010]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=59
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25

Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Re-Entered
Re-entered date: August 8, 2010

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[08082010]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at}amsat.org
NNNN
/EX

159. ANS-331 AMSAT News Service Weekly Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2011-11-27 01:45:21 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <001b01ccaca6$33611210$9a233630$@net>
Source record: 285
Cross-posted to: rec.radio.amateur.space,rec.radio.info

AMSAT NEWS SERVICE
ANS-331

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* Longer Eclipse Periods Affecting AO-51 Operation
* Latest AMSAT Project Fox Information Posted
* Watch On-Line: Interviews Recorded at AMSAT 2011 Space Symposium
* This Week 50 Years Ago: OSCAR 1 Announcement for December 1, 1961
* Arizona Centennial K7UGA Announces Expanded Satellite Operation
* Next Proposal Cycle for US Based ARISS School Contacts Opens
* 14 Year-old Co-ordinates ARISS Contact for Her School
* ISS Expedition 29 Astronaut Hams Land Safely
* Satellite Shorts From All Over

SB SAT @ AMSAT $ANS-331.01
Longer Eclipse Periods Affecting AO-51 Operation

AMSAT News Service Bulletin 331.01
>From AMSAT HQ SILVER SPRING, MD.
November 27, 2011
To All RADIO AMATEURS
BID: $ANS-331.01

AO-51 Command Stations report that the seven year old spacecraft is now shutting down its transmitter after losing sunlight on its solar panels during eclipse periods. Two of the six battery cells are now dead. Since July 31, 2010 AO-51 has maintained continuous and stable operations due to careful tuning of its power settings.

The AO-51 Operations Team reported on November 25 that the on-board computer (IHU) crashed between 1815 and 1945Z due to low voltage. This happened after a few days of intermittent and unpredictable operation.

AO-51 Control Operators Mark Hammond, N8MH and Drew Glasbrenner, KO4MA reset the satellite and started the repeater back up around

~2030Z. Satellite operation was set to the following:

Uplink: 145.880, no PL tone required
Downlink: 435.150 at about 300 milliwatts

Drew reported that telemetry data showed the battery voltage was low, around 4.9v, with cell 1 less than 1 volt. The impending third cell failure will likely end continuing operations, particularly if it fails shorted as the others have. At present there remains little margin as the operations team has observed the transmitters cutting off around 4.7 to 4.6 volts prior to the last reset, in eclipse.

Please submit your AO-51 reports to the OSCAR Status Web Page: http://oscar.dcarr.org. The command stations monitor this for changes in the operation. While worldwide participation is good, more reports from US operators are appreciated.

Eclipse periods, which are expected to reach 30 minutes by the end of 2011, are causing AO-51 to shut itself OFF due to low voltage.

Please support AMSAT-NA and the other AMSAT groups around the world, and help us get new satellites into orbit. Projects like Fox, FunCube, P3E, and Kiwisat need your financial support to keep our amateur satellite fleet flying.

You can keep up with the latest AO-51 Command Team news at: http://www.amsat.org/amsat-new/echo/CTNews.php

[ANS thanks the AO-51 Command Team for the above information]

/EX

SB SAT @ AMSAT $ANS-331.02
Latest AMSAT Project Fox Information Posted

AMSAT News Service Bulletin 331.02
>From AMSAT HQ SILVER SPRING, MD.
November 27, 2011
To All RADIO AMATEURS
BID: $ANS-331.02

AMSAT-NA's next generation of satellites, Fox-1 and Fox-2 are under development by the Engineering Team.

Fox-1 will replace the aging AO-51 satellite which has performed as the most popular EasySat, attracting new satellite operators since it can be worked with simple equipment. However, after more than 7 years of service, AO-51 is starting to show its age and needs an affordable replacement.

Why two satellites? The original Fox Engineering Team Study was for a baseline satellite, with several options for enhancements. At that time, AO-51 was functioning well, with no indication that its lifetime would be short enough to impact the Fox Project. With the im-

pending loss of AO-51, it was decided to break the Fox Project up into a quickly deployable baseline FM satellite, Fox-1, and a second more flexible satellite, Fox-2.

Fox-2 will benefit from the development work of the baseline Fox-1, with the additional time being applied to developing its more sophisticated power and Software Defined Transponder (SDX) communications systems.

The Powerpoint presentations on AMSAT's Fox web site provide a good view of the technical progress: http://www.amsat.org/amsat-new/fox/

Project milestones completed this year:

+ Fox-1 project defined - July 2011
+ Concept of Operations (ConOps) - September 2011
+ System Requirements Spec (SRS) - October 2011
+ Experiment Payload Specification - November 2011
+ NASA ELaNa Proposal Submitted - November 2011

Preliminary milestones for 2012 and 2013 are:

+ Baselined Project Plan - January 2012
+ Preliminary Design Review (PDR) - March 2012
+ Engineering prototype - July 2012
+ Critical Design Review (CDR) - August 2012
+ Flight model ready for test - November 2012
+ Launch Readiness Review - January 2013
+ Launch Target - 2nd half of 2013

Also available for download from the AMSAT Project Fox web page are the Powerpoint presentations by members of the AMSAT Engineering Team at the 2011 AMSAT Space Symposium in San Jose:

+ Fox-1 Project Overview
+ Fox-1 Mechanical Design
+ Fox-1 Thermal Design
+ Fox-1 Radiation Environment

If you are interested in more details you may wish to see the papers in the yearly Proceedings of the AMSAT-NA Space Symposium, available from the AMSAT Store:
http://www.amsat-na.com/store/item.php?id0190

[ANS thanks the AMSAT Engineering Team for the above information]

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SB SAT @ AMSAT $ANS-331.03
Watch On-Line: Interviews Recorded at AMSAT 2011 Space Symposium

AMSAT News Service Bulletin 331.03
>From AMSAT HQ SILVER SPRING, MD.
November 27, 2011

To All RADIO AMATEURS
BID: $ANS-331.03

During the 2011 AMSAT Symposium in San Jose a few weeks ago, ARRL Test Engineer Bob Allison, WB1GCM interviewed an number of AMSAT Officers and Lance Ginner of Project OSCAR.

These interviews are now available on You Tube.

+ Barry Baines, WD4ASW
http://www.youtube.com/watch?v=LBB4imXGk&feature=related

+ Gould Smith, WA4SXM
http://www.youtube.com/watch?v=_-2wNmFqc

+ Jan King, VK4GEY
http://www.youtube.com/watch?v=xe76LEK9Y&feature=related

+ Keith Baker, KB1SF
http://www.youtube.com/watch?v=o6U7CPvvo&feature=related

+ Lance Ginner, K6GSJ - Project OSCAR
http://www.youtube.com/watch?v=Kc2ZY3LCA&feature=related

[ANS thanks Gould Smith, WA4SXM for the above information]

/EX

SB SAT @ AMSAT $ANS-331.04
This Week 50 Years Ago: OSCAR 1 Announcement for December 1, 1961

AMSAT News Service Bulletin 331.04
>From AMSAT HQ SILVER SPRING, MD.
November 27, 2011
To All RADIO AMATEURS
BID: $ANS-331.04

The AMSAT News Service is re-running the Project OSCAR Newsletters to commemorate the 50th anniversary of OSCAR 1. During the November/ December 2011 time frame you will be able to share the excitement of the launch campaign that started it all 50 years ago.

The Newsletters were hand-typed back in 1961. Thanks to Don Ferguson, KD6IRE for scanning the original documents announcing OSCAR 1.

<Begin Commemorative Message>

O S C A R N E W S L E T T E R

December 1, 1961

Good News!
The following is quoted from the Department of Defense News Release dated November 15, 1961:

AIR FORCE TO ORBIT SMALL SATELLITE FOR "HAM" OPERATORS' USE

"The Air Force is planning to boost into orbit a small amateur radio satellite so that "ham" operators around the world can contribute to the world's knowledge on the development and operation of space communications systems."

"Known as Project OSCAR - Orbiting Satellite Carrying Amateur Radio - the program is the result of extensive thought and planning on the part of several California amateur operators. They have formed the OSCAR Association to follow through on the project.

"The Air Force Space Systems Division in Los Angeles has agreed to orbit the OSCAR satellite on a space available basis on board a DISCOVERER satellite which will be launched from Vandenberg AFB next month.

"The OSCAR satellite will weigh approximately ten pounds and will be lifted into orbit on the external aft portion of the AGENA Satellite. Sometime after the AGENA has attained orbit the OSCAR satellite will separate from the mother vehicle. Antennae will extend and the transmitter will commence operation. The OSCAR satellite will contain its own battery power system and is anticipated to have a 30-day life in orbit. "The OSCAR satellite is designed to investigate radio propagation phenomena in the two meter (144-146) portion of the radio frequency spectrum."

Simultaneously, a letter from Dr. J. V. Charyk, Under Secretary of the Air Force to the American Radio Relay League, says (in part):

"I am pleased to advise that the Air Force will undertake to place into orbit an Oscar package.....Our Space Systems Division has been instructed to accomplish the Oscar package launching at the earliest feasible date (italics ours) on a non-interference basis to the performance or mission of the launch carrier vehic1e..... Please be assured of the complete cooperation by the Air Force toward successful accomplishment of this amateur experiment."

THIS MEANS THAT THE LAUNCH INTO SPACE OF OSCAR I, THE WORLD'S FIRST AMATEUR RADIO SATELLITE IS IMINENT -- PROBABLY WELL WITHIN THE MONTH! ACTUAL LAUNCH DATE CANNOT BE YET RELEASED FOR SECURITY REASONS. LISTEN TO THE VOICE OF AMERICA BROADCASTS AND THE OFFICIAL ARRL BROADCAST FROM WIAW FOR LAUNCH DATE! ALSO WATCH YOUR LOCAL NEWSPAPER FOR LAUNCH INFORMATION!

RECENT "UP" AND "AP" OSCAR NEWS DESPATCHES HAVE BEEN FEATURED IN MAJOR NEWSPAPERS, AND IN ADDITION, W6SAI AND K6LFH WERE INTERVIEWED BY VOICE OF AMERICA ON THE NOVEMBER 27TH AMATEUR RADIO PROGRAM WHICH FEATURED THE OSCAR STORY. YOUR COOPERATION IN THIS IMPORTANT, WORLD-WIDE AMATEUR SPACE EXPERIMENT IS URGENTLY REQUIRED. SEE RECENT ISSUES OF QST AND CQ MAGAZINES FOR ARTICLES ON RECEPTION AND TRACKING OF THE OSCAR 145 MC RADIO BEACON. AS THE BEACON HAS NO RECEPTION PACILITIES, QQ NQT MAKE CALLS TO THE BEACON. KEEP YOUR TRANSMITTER CLEAR OF 145 MC! OSCAR I WILL BE IN POLAR ORBIT, THUS

PASSING OVER EACH POINT ON EARTH APPROXIMATELY FOUR TIMES PER DAY
ON NORTH-TO-SOUTH AND SOUTH-TO-NORTH ORBITS.

THE TIME IS NOW! ARE YOU READY?

NOW THAT WE HAVE RECEIVED ALL NECESSARY PERMISSION AND ASSISTANCE,
OSCAR 1 WILL BE ON ITS OWN WHEN IT IS EJECTED FROM THE PARENT VE-
HICLE. THE OSCAR ASSOCIATION AND THE U. S. AIR FORCE HAVE AT THIS
POINT DONE ALL THEY CAN DO TO MAKE THE EXPERIMENT A SUCCESSFUL ONE.
THE RESULTS OF THIS EXPERIMENT WILL DEPEND UPON YOU - THE RADIO AMA-
TEUR. YOU MUST CARRY ON FROM THIS POINT! YOUR COOPERATION IN THIS
NON-COMMERCIAL, NON-MILITARY SPACE EFFORT WILL BE IN THE BEST TRA-
DITIONS OF AMATEUR RADIO!

GOOD LUCK!

A11 reception reports of Oscar I should be directed to:
Oscar Association, P. O. Box ---, Sunnyvale, California, USA.
A11 correct reports will receive a special OSCAR I QSL card, veri-
fying reception of the world's first amateur radio satellite.

<End of Commemorative Message>

[ANS thanks Don Ferguson, KD6IRE and Project OSCAR for the above
information]

/EX

SB SAT @ AMSAT $ANS-331.05
Arizona Centennial K7UGA Announces Expanded Satellite Operation

AMSAT News Service Bulletin 331.05
>From AMSAT HQ SILVER SPRING, MD.
November 27, 2011
To All RADIO AMATEURS
BID: $ANS-331.05

The November 20 ANS-324 Bulletins carried the announcement of the
Central Arizona DX Association (CADXA) special event operation in
celebration of the Arizona Centennial during the week of February
13-19th, 2012.

They will be using the callsign of the late Senior Senator, and
Arizona native son, Barry M. Goldwater, K7UGA. Operations will be
on all amateur bands (160-2 meters); and will be using CW, SSB,
RTTY, PSK31 and Satellite modes.

This week Arizona's AMSAT Field Ops coordinator Patrick Stoddard,
WD9EWK/VA7EWK announced expanded satellite operations using the
K7UGA callsign:

+ Watch for Patrick's announcements on amsat-bb for the specific
passes he plans to operate using the K7UGA callsign on February 14.

+ Patrick plans to use the K7UGA call sign for his on-air satellite demonstrations from the Yuma, Arizona Hamfest on February 17-18, 2012.

+ Patrick posted information about this on AMSAT's online calendar of events:
http://www.amsat.org/amsat-new/fieldops/eventDetail.php?eIDb9

+ Also refer to http://www.qrz.com/db/k7uga for additional info.

Rick Tejera, K7TEJ says the Thunderbird Amateur Radio Club will be operating a special event station for the Arizona Centennial as well the weekend of Feb 11-12, 2012. Rick plans to operating on as many FM satellite passes as possible during the event using the W7A call.

[ANS thanks Patrick Stoddard, WD9EWK/VA7EWK and Rick Tejera, K7TEJ for the above information]

/EX

SB SAT @ AMSAT $ANS-331.06
Next Proposal Cycle for US Based ARISS School Contacts Opens

AMSAT News Service Bulletin 331.06
>From AMSAT HQ SILVER SPRING, MD.
November 27, 2011
To All RADIO AMATEURS
BID: $ANS-331.06

NASA is now accepting proposals from U.S. schools, museums, science centers and community youth organizations to host an Amateur Radio on the International Space Station, or ARISS, contact between July 15, 2012, and Jan. 15, 2013. To maximize these radio contact opportunities, NASA is looking for organizations that will draw large numbers of participants and integrate the contact into a well-developed education plan. Proposals are due Jan. 30, 2012.

Using amateur radio, students can ask astronauts questions about life in space and other space-related topics. Students fully engage in the ARISS contact by helping set up an amateur radio ground station at the school and then using that station to talk directly with a crew member on the International Space Station for approximately 10 minutes. The technology is easier to acquire than ever before. ARISS has a network of mentors to help you obtain the technology required to host this once in a lifetime opportunity for your students.

Interested parties should contact Teaching From Space, a NASA Education office, to obtain complete information including how the technology works, what is expected of the host organization and how to obtain the proposal/application form by sending an email to J SC-TFS-ARISS@mail.nasa.gov or by calling 281-244-1919.

Additional information can be found at: http://tinyurl.com/6fc2lzn (NASA Teaching From Space)

[ANS thanks the NASA Teaching From Space Office for the above information]

/EX

SB SAT @ AMSAT $ANS-331.07
14 Year-old Co-ordinates ARISS Contact for Her School

AMSAT News Service Bulletin 331.07
>From AMSAT HQ SILVER SPRING, MD.
November 27, 2011
To All RADIO AMATEURS
BID: $ANS-331.07

The Amateur Radio on the International Space Station (ARISS) Status Report for the Week of November 21, 2011 noted that the November 14 A.S.J. Memorial High School in Thetford Mines, Qu�bec, Canada ARISS contact with Astronaut Mike Fossum, KF5AQG on the ISS was a success.

A 14 year-old girl co-ordinated the contact with some help from her father and support from her math teacher. She also acted as radio operator during the event, which was attended by approximately 350 people, including local and regional media.

After the contact, she received a standing ovation from her fellow students and senior provincial members of parliament have asked her, along with her team, to attend the provincial legislature to be recognized for her efforts.

CBC Radio Canada conducted an interview with the student and her teacher. The audio is available at: http://tinyurl.com/cbvqopv (CBC.ca)

[ANS thanks [ANS thanks Carol Jackson, KB3LKI, and the ARISS Status Report for the above information]

/EX

SB SAT @ AMSAT $ANS-331.08
ISS Expedition 29 Astronaut Hams Land Safely

AMSAT News Service Bulletin 331.08
>From AMSAT HQ SILVER SPRING, MD.
November 27, 2011
To All RADIO AMATEURS
BID: $ANS-331.08

Expedition 29 Commander Mike Fossum KF5AQG, Flight Engineers Satoshi Furukawa KE5DAW of the Japan Aerospace Exploration Agency and Sergei Volkov U4MIR of the Russian Federal Space Agency landed their Soyuz spacecraft in Kazakhstan on November 22.

Video cameras on the space station captured the dramatic re-entry of the Soyuz capsule:
http://www.youtube.com/watch?feature�ayer_embedded&v�Ro5XeK4DU

Video footage of the change over ceremony to Expedition 30 and the Soyuz undocking have been posted by UniverseToday.com at: http://tinyurl.com/7c3ucxw

Dan Burbank, KC5ZSX now leads Expedition 30. Burbank and Flight Engineers Anatoly Ivanishin and Anton Shkaplerov of Russia will continue research and maintenance aboard the station.

The remaining Expedition 30 crew members, NASA astronaut Don Pettit KD5MDT, European Space Agency astronaut Andre Kuipers PI9ISS, and cosmonaut Oleg Kononenko RN3DX, are scheduled to launch Dec. 21 from the Baikonur Cosmodrome and dock with the station on Dec. 23.

[ANS thanks NASA and UniverseToday.com for the above information]

/EX

SB SAT @ AMSAT $ANS-331.09
Satellite Shorts From All Over

AMSAT News Service Bulletin 331.09
>From AMSAT HQ SILVER SPRING, MD.
November 27, 2011
To All RADIO AMATEURS
BID: $ANS-331.09

+ Yuri, UT1FG, will once again be traveling across the Atlantic Ocean and will be active from some "Wet grids" as UT1FG/MM between November 25, 2011, through the end of May 2012. His first trip will be from the Panama Cannal to Huelva, Spain. Yuri is reportedly a crew member on the ship, so activity will be during his free time. Operations are expected on all amateur radio bands, 160-2 meters, 70 cm, and also including the satellite. His activities will be mainly through the satellite, but also look for him on the HF bands. He will also be active on 6 meters, conditions permitting. QSL via his home callsign, direct (see QRZ.com), by the Bureau or to his QSL Manager UX0FY.
SOURCE: Ohio/Penn DX Bulletin #1037

+ If you are interested in a certificate for ARISSat reception, the directions are at: http://www.arissat1.org. This link will take you directly to the Reception Certificate page: http://tinyurl.com/42nqk55

+ Don't forget to keep forwarding your received telemetry to be automatically entered into the "Who Will Catch the Last Telemetry From ARISSat-1/KEDR" Contest. Just submit ARISSat-1 telemetry over the Internet using either ARISSatTLM telemetry program. You can use the PC version or the MAC version of ARISSatTLM and you are automatically eligible. Download ARISSatTLM for PC or MAC from the software link on the main ARISSat-1 web page: http://www.arissat1.org/v3/ if you don't already have it.

+ On Tuesday, November 15, the ARISS International Team held its monthly teleconference. A recap was given on the ARISS face-to-face meeting held in October, and status updates were given on HamTV and ARISSat-1. Minutes have been posted.
See: http://ariss.rac.ca/arisstel2011-11-15.htm

+ This video was put together by Astronaut Ron Garan, who returned home on September 16, 2011 after spending about six months in space. He set up a Nikon D3S camera in the Cupola on the space station, took some practice shots, and worked on getting the right settings, then set up the camera to take about 500 pictures at 3-second intervals. Ron posted the results on his blog, "Time Lapse From Space - Literally - The Journey Home at: http://vimeo.com/32430473
(via UniverseToday.com)

+ Martin Bruchanov OK2MNM has made his new book "Image Communication on Short Waves" available free on the web. You can either read it online or download the chapters in PDF format. Image Communication on Short Waves can be found at http://www.sstv-handbook.com/
(via Southgate)

+ The next time you find your QSO on 75 meters stuck on the weather or the state of the other guy's gallbladder try steering the conversation to the design and construction of your own homebrew GPS receiver. Bone up at: http://www.holmea.demon.co.uk/GPS/Main.htm
(via Dan, N8FGV)

[ANS thanks everyone for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office. And, with that, please keep in mind the ham who learned many words in mathematics and geometry have their root in ancient languages. A contemporary of Pythagoras was watching a parrot playing with some twigs. Although birds often play with twigs, leaves and branches, this parrot, to the mathematician's amazement, actually arranged the pieces of wood into a pattern with multiple sides. Then, unfortunately, the bird keeled over, dead. The mathematician was so moved that he named the shape, "Dead parrot." Although - of course - this is why, to this day, we call that shape a polygon.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM

160. Weekly Highlights of Solar and Geomagnetic Activity, 21 - 27 November 2011

Newsgroup: rec.radio.amateur.space
Date: 2011-11-29 22:30:23 UTC
From: SWPC.Webmaster@noaa.gov
Message-ID: <20111129223007.C79AC33C8E@panix2.panix.com>
Source record: 286
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.info

```
:Product: Weekly Highlights and Forecasts
:Issued: 2011 Nov 29 2039 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
# Weekly Highlights and Forecasts
#
Highlights of Solar and Geomagnetic Activity
21 - 27 November 2011

Solar activity was low. Region 1356 (N15, L=230, class/area Ehc/400
on 21 November) was the most region significant during the period.
Region 1354 (S17, L=268, class/area Dai /220 on 20 November) began
the period with a steady decline in area and complexity, ending as a
simple Axx group. As Region 1354 declined, Region 1356 grew in spot
count and magnetic complexity. It produced seven C-class x-ray
flares and ten optical flares on the 22nd, the largest of which was
a C4 at 22/0404Z. Several coronal mass ejections (CMEs) were
observed throughout the week; however Type II radio emissions were
only reported on 23/0847Z (1008 km/s) and 25/2154Z (931 km/s). The
sole CME expected to threaten earth was a full halo event on
26/0710Z that originated from a filament eruption near N08W49
accompanied by a long duration C1 flare. The CME was first evident
in LASCO C2 imagery at 26/0712Z and also easily seen in STEREO-A
COR2 imagery. Its velocity was estimated to be 790 km/s.

A greater than 10 MeV proton flux greater than 10 pfu event began
26/1125Z associated with the filament eruption described in the
solar summary. This event was still in progress at the time of this
report and reached a maximum of 80 pfu at 27/0125Z.

The greater than 2 MeV electron flux at geosynchronous orbit was at
normal to moderate levels the entire period.

Geomagnetic field activity was generally quiet. Brief unsettled to
minor storm periods were observed at high latitudes on 22 and 24
November associated with prolonged negative Bz.

Forecast of Solar and Geomagnetic Activity
30 November - 26 December 2011

Solar activity is expected to be at predominately low levels with a
chance for isolated M-class activity due to the anticipated return
of several active regions.
```

The current 10MeV proton event in progress is expected to end by prior to the beginning of the outlook period.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at normal to moderate levels the entire period.

Geomagnetic field activity is expected to begin the forecast period at unsettled to active levels as a coronal hole high speed stream becomes geoeffective. Conditions should persist for a day or so before calming to mostly quiet levels from 01 December onward. Another coronal hole high speed stream is expected on 09 and 10 December, when activity may again increase to unsettled and active conditions. Mostly quiet conditions are anticipated once again from 11 - 23 December before the next coronal hole high speed stream is forecast to be geoeffective and produce unsettled to active conditions on 23 December. Mostly quiet conditions are forecast from 24 December through the end of the period.

161. Crossposting Permitted to rec.radio.amateur.moderated

Newsgroup: rec.radio.amateur.space
Date: 2011-12-01 07:00:02 UTC
From: rram@panix.com
Message-ID: <radio/ham-radio/moderated/crossposting-1-1322722801@panix.com>
Source record: 287
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.info

```
Posted-By: auto-faq 3.3.2 beta (PGPMoose V2.0, Perl 5.005)
Archive-name: radio/ham-radio/moderated/crossposting
Revision: 1.2 2011/11/02 04:08:53
Posting-Frequency: posted monthly
URL: http://www.panix.com/~rram/usenet/rram/index.html

Changes followed by "|".

After a 30-day public discussion and feedback period to gauge reader
opinions in March of 2009:

http://groups.google.com/group/rec.radio.amateur.moderated/browse_thread/thread/d7d337db35
f23326

the rec.radio.amateur.moderated Moderation Team had decided to consider |
amending its charter, and permit limited simultaneous crossposting to
rec.radio.amateur.moderated and one other unmoderated
amateur-radio-related discussion newsgroup. After a successful trial |
period (90 days, through early July 2009), we decided to adopt this |
change permanently. |

Approved rec.radio.amateur.* newsgroups are those that are currently
listed in the latest version of the "List of Big Eight Newsgroups" which
is crossposted monthly to news.announce.newgroups, news.groups, and
news.lists.misc.

Approved alt.radio.amateur.* and alt.ham-radio.* newsgroups are those
that have been created consistent with the suggestions in "So You Want
to Create an Alt Newsgroup" at:

http://www.faqs.org/faqs/alt-creation-guide/

Approved regional hierarchy newsgroups are those that contain either
"radio.amateur" or "ham-radio" in their names, including
uk.radio.amateur and aus.radio.amateur.misc.

We will make every reasonable effort to keep our list of approved
newsgroups up-to-date. In case we have overlooked any, and a submission
is rejected in error as a result, the rejected submitter can E-mail us
at our administrative contact address (in the signature at the bottom of
this article, and the default Reply-To for the rejection message)
requesting that it be added, and that the article be approved. We may
still choose to reject articles crossposted to any alt.* newsgroup with
an inappropriate name, including obscene language, embedded
name-calling, or encouragement of unlawful conduct.
```

Please direct any comments, questions, or criticisms to
rec-radio-amateur-moderated-request@panix.com.

162. ANS-338 AMSAT News Service Weekly Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2011-12-05 20:12:59 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <002601ccb38a$4102c0e0$c30842a0$@net>
Source record: 288
Cross-posted to: rec.radio.amateur.space,rec.radio.info

AMSAT NEWS SERVICE
ANS-338

ANS is a free, weekly, news and information service of AMSAT North America,
The
Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in
designing, building, launching and communicating through analog and digital
Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* FASTRAC-1 Opened for Digipeating
* AO-51 Remembered
* Donations Needed to Keep AMSAT Project Fox Moving Forward
* ARISSat-1/KEDR Orbit Losing 1.5 KM Per Day
* U.S. Congress Proposes Easing of ITAR Restrictions
* SKN On OSCAR 2012 In Memory Of W1JSM
* This Week 50 Years Ago: OSCAR 1 Announcement for December 5, 1961
* AMSAT-DL Receives Mars Science Laboratory
* Explorer-1 [Prime] Renamed to Honor Former Director
* Satellite Shorts From All Over

SB SAT @ AMSAT $ANS-338.01
FASTRAC-1 Opened for Digipeating

AMSAT News Service Bulletin 338.01
From AMSAT HQ SILVER SPRING, MD.
December 4, 2011
To All RADIO AMATEURS
BID: $ANS-338.01

The FASTRAC satellites have been in operation for more than a year and the team has been able to get a lot of data from them, in great part due to the amazing support from the amateur radio community.

Over the last month the team noticed that one of FASTRAC-1's on board microcontrollers which controls one of the experiments has not been booting up correctly. The team has done everything possible to correct this issue apart from turning it off which can only happen if the bat-

teries fall below an specific charge level. Since the satellites have been power positive throughout this whole year the only way this can happen is if the satellites transmit more often. Given that one of FASTRAC goals has always been to eventually provide a platform for amateur radio enthusiasts to use after the primary mission was over, the team has decided to open up FASTRAC-1 to the amateur radio community with the hope as more people use it to digipeat through the satellite, the battery levels will diminish and cause a hard reset of the microcontrollers on board.

The satellite will be configured so that amateur radio operators can use it beginning on Friday Dec 2 at 1600 UTC. Starting on this date people will be able to digipeat through the satellites. The call sign and frequencies of the satellite are summarized below and an example of digipeating through the satellite is also shown in below. To increase the chances of causing a hard reset, it is requested that as many amateur radio enthusiasts try to digipeat through the satellite on the weekend of Dec 10. If you are successful at digipeating through the satellites or have any problems doing so please let us know at fastracsats@gmail.com, through our Facebook page: (www.facebook.com/fastracsats) or through the forums on our website (http://fastrac.ae.utexas.edu/for_radio_operators/users/phpBB3/index.php) .

Frequency Information for FASTRAC-1

- FASTRAC-1 "Sara Lily" Downlink Frequency: 437.345 MHz
- FASTRAC-1 "Sara Lily" Uplink Frequency (1200 or 9600 baud): 145.825MHz
- FASTRAC-1 "Sara Lily" Satellite Call Sign: FAST1

*Example of Digipeating through FAST1 *

- cmd: c CALLSIGN via fast1
- cmd: KE5DTW>CALLSIGN,FAST1/1: <<C>>:
- CALLSIGN>KE5DTW,FAST1*/1: <UA>:
- *** CONNECTED to CALLSIGN VIA FAST1

Here the example shows KE5DTW (UT Austin Ground Station) digipeating through FAST1 to connect to CALLSIGN. CALLSIGN represents an arbitrary callsign and should be replaced with the callsign of the station with whom a connection is being attempted. The above example is based on a Kantronics KPC9612+ TNC.

For a PDF version of the announcement please go to the following link: http://fastrac.ae.utexas.edu/FASTRAC_Digipeating_Announcement.pdf

[ANS thanks Sebastin, KE5FKV, for the above information]

/EX

SB SAT @ AMSAT $ANS-338.02
AO-51 Remembered

AMSAT News Service Bulletin 338.02
From AMSAT HQ SILVER SPRING, MD.
December 4, 2011
To All RADIO AMATEURS
BID: $ANS-338.02

Dozens of messages were posted to the amsat-bb after the news of AO-51's end of mission was received. Many remembered their contacts, several thanked the Operating Team. Many noted thatAO-51 was the satellite that brought them into this part of our hobby.

While too numerous to list them all a sample of the content seems appropriate ...

+ Robin Haighton, VE3FRH, who was AMSAT-NA President when AO-51 was designed and launched wrote, "I was very sorry to hear of the final loss of AO-51 (Echo) as it was the last satellite developed by AMSAT-NA and launched in 2004. As I recall much of the work was carried out by Mark Kanawati, Jim White WD0E, Chuck Green N0ADI (who accompanied the satellite to the Launch site) and Rick Hambly W2GPS. My thanks to all.

Photo galleries of the people and AO-51 can be found at:
http://www.amsat.org/amsat-new/echo/integration.php
http://bach.as.arizona.edu/gallery/main.php?g2_itemIdt51
http://www.amsat.org/amsat-new/echo/photos.php

+ Control Operator Mark Hammond, N8MH commented, "We essentially got 'a free, bonus overtime' from July 2010 until now. We thought it was about gone back then...check your logs and see just how many QSOs you made on AO-51 from the end of July 2010 until the end of November 2011 (and then check how many overall during the 7.5 years).

To which Patrick WD9EWK/VA7EWK replied, "I have logged a total of 10931 satellite QSOs. Of those, 4891 (44.7%) were on AO-51's different configurations. Since July 2010, I have logged 2233 satellite QSOs, with 574 of those (25.7%) on AO-51. My last AO-51 QSOs were logged on 13 November.

+ Pete, WB2OQQ wrote, "AO-51, has been one of my best satellite recruiting tools and I will certainly miss her, however she gave us many wonderful years of faithful service, good bye dear friend. It is important to note that the control team managed AO-51 in a manner that I believe extended her life, thank you. We all must continue to support AMSAT's Fox-1 project, and other AMSAT projects I believe thru Amateur Satellites we have found a potential path to excite the children today and continue the STEM initiative.

+ Bob, KC2WYH recalls, "I am a new ham, licensed less than two years, and worked John K8YSE via AO-51 with my little HT and an Arrow maybe six weeks after passing my Tech. A few months later after another test my first QSO signing "slash AG" was again on that bird, with Patrick WD9EWK. Just to "echo" what

others have been saying: AO51, R.I.P. And a hearty thank-you to the Control Team for giving us so many many happy and proud hours!

+ Andreas, VK4HHH, AMSAT-VK Member said, "I think thanks are in order for the operations team who provided us with many years of enjoyment on countless AO-51 QSO's. Job well done from start to finish. RIP little satellite. May your solar panels always been shone on Look up and see what your grand-daddy, AO-07, has done and maybe you can draw the inspiration to come back to life in a decade or so.

+ Hector, CO6CBF wrote, "AO-51 has been like a work horse. It is the bird which got me into satellites. Thanks very much to the control team for the great work done.

+ Mani, VU2WMY from AMSAT-India and Secretary & Station-In-Charge of the Upagrah Amateur Radio Club VU2URC at India's ISRO Satellite Centre, Bangalore sent this message, "It is really a sad news. Bidding a farewell to AO-51 with a very heavy heart. Looking at the success, we all at Upagrah Amateur Radio Club VU2URC at ISRO Satellite Centre and AMSAT-India express our heartfelt and sincere thanks, appreciations and compliments to the entire AO-51 (ECHO) team. AO-51 was truly one of the best amateur radio satellites. It was a very favorite for many of our VU hams for its strong signals and ease of operations. 'Thank you AO-51 for your great and fruitful services to the World of Amateur Radio'. We take this opportunity to thank each & every one associated with this great project and wish AMSAT-NA all the success in their future endeavors.

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-338.03
Donations Needed to Keep AMSAT Project Fox Moving Forward

AMSAT News Service Bulletin 338.03
From AMSAT HQ SILVER SPRING, MD.
December 4, 2011
To All RADIO AMATEURS
BID: $ANS-338.03

"Given the sad news on AO-51," AMSAT President Barry Baines, WD4ASW, said, "we highlighted at the recent 2011 Symposium that AMSAT is actively developing Fox-1, a new spacecraft that is designed to replace AO-51. Fox-1 development now takes on a great sense of urgency."

AMSAT Vice-President of Engineering, Tony Monteiro, AA2TX says, "Fox-1 will advance single-channel FM repeater satellite operation beyond the experience of AO-51. It will advance AMSAT to the next generation of AO-51 class satellites."

Fox-1 is designed for longer operational life with these features:

+ Fox-1 is designed to operate in sunlight without batteries once
the battery system fails. This applies lessons learned from AO-51
and ARISSat-1 operations.

+ In case of IHU failure Fox-1 will continue to operate its FM
repeater in a basic, 'zombie sat' mode, so that the repeater
remains on-the-air.

+ Fox-1 is designed as the immediate replacement for AO-51. Its U/V
(Mode B) transponder will make it even easier to work with modest
equipment.

+ From the ground user's perspective, the same FM amateur radio
equipment used for AO-51 may be used for Fox-1.

+ Extending the design, Fox-2 will benefit from the development work
of Fox-1 by adding more sophisticated power management and Software
Defined Transponder (SDX) communications systems.

Barry concluded, "AMSAT's ability to provide a replacement spacecraft
and get it launched is dependent upon the active support of donors
who wish to see Fox-1 fly."

Several opportunities to make your donation include:

+ Call Martha at the AMSAT Office +1-888-FB AMSAT (1-888-322-6728)
+ Paypal donation widget on the main page at: http://www.amsat.org
+ Paypal donation widget for Project Fox at:
http://www.amsat.org/amsat-new/fox/
+ The AMSAT Store: http://www.amsat-na.com/store/categories.php

The Powerpoint presentations from the 2011 AMSAT Space Symposium on
the Project Fox web site provide a good overview of the technical
progress: http://www.amsat.org/amsat-new/fox/

+ Fox-1 Project Overview
+ Fox-1 Mechanical Design
+ Fox-1 Thermal Design
+ Fox-1 Radiation Environment

[ANS thanks AMSAT President Barry Baines, WD4ASW, the AO-51 Operating
Team and the Project Fox Engineering team for the above information]

/EX

SB SAT @ AMSAT $ANS-338.04
ARISSat-1/KEDR Orbit Losing 1.5 KM Per Day

AMSAT News Service Bulletin 338.04
From AMSAT HQ SILVER SPRING, MD.
December 4, 2011
To All RADIO AMATEURS
BID: $ANS-338.04

The ARISSat-1/KEDR Operating Team reminds you that if you have been putting off working through the ARISSat-1 repeater, receiving SSTV pictures, or submitting telemetry, the next few weeks will be your last opportunity to be a part of this satellite's history.

Since deployment in August, ARISSat-1 has descended about 60 km,and is currently losing more than 1.5 km per day. The rapid rate is partially the result of the recent solar activity on the atmosphere, significantly increasing the drag.

The predictions by several individuals and groups are all converging toward a reentry in January or February, 2012. Heating will become significant before then. Remember, good telemetry in this period provides invaluable information to the engineering team, to be used in future projects.

The orbit period changes about 30 seconds per day, and that will increase steadily. Be certain to update your tracking program Keps from Space-Track or CelesTrak before each pass. They issue revised versions 3-5 times daily. As the descent continues, this will become even more critical to copying the telemetry beacon, especially unattended.

[ANS thanks the ARISSat-1/KEDR Operating Team for the above information]

/EX

SB SAT @ AMSAT $ANS-338.05
U.S. Congress Proposes Easing of ITAR Restrictions

AMSAT News Service Bulletin 338.05
From AMSAT HQ SILVER SPRING, MD.
December 4, 2011
To All RADIO AMATEURS
BID: $ANS-338.05

In the United States the International Traffic in Arms Regulations (ITAR) law has threatened amateur radio satellite developers with jail terms and heavy fines if they collaborate with overseas amateur satellite projects on projects deemed to be "dual use". The dual use designation is applied to technology for which the Department of Defense and Department of State determines may have military applications even if it is developed for civilian research or application.

This ITAR dual use designation has made AMSAT-NA a "munitions supplier" as defined by the law. It almost completely eliminated AMSAT-NA cooperation and assistance with amateur radio satellite projects in any other country than the USA.

A proposed change in the ITAR law by Congressional bill H.R. 3288 may help ease the Federal Government restrictions on US Hams engaging in collaborative projects with Radio Amateurs in rest of the world.

H.R. 3288: Safeguarding United States Satellite Leadership and Security Act of 2011 sponsored by Rep. Howard Berman is at the first step of the legislative process in Congresss. It proposes to reduce ITAR

restrictions on commercial satellite development.

Additional information, including a link to the text of the bill,
list of the co-sponsors, and a progress-tracking overview is at:
http://www.govtrack.us/congress/bill.xpd?bill=h112-3288

The UniverseToday.com article 'Could We Soon See the End of ITAR's
Chokehold on Space Exploration?' provides a good overview of this
vital bill, read it at http://tinyurl.com/6r3nb4m

[ANS thanks UniverseToday.com and govtrack.us for the above information]

/EX

SB SAT @ AMSAT $ANS-338.06
SKN On OSCAR 2012 In Memory Of W1JSM

AMSAT News Service Bulletin 338.06
From AMSAT HQ SILVER SPRING, MD.
December 4, 2011
To All RADIO AMATEURS
BID: $ANS-338.06

You are cordially invited to participate in Straight Key Night on
OSCAR 2012, conducted by AMSAT for all radio amateurs throughout the
world. This year's event is dedicated to the memory of Don Brown,
W1JSM, who passed away in 2011, aged 90. Don was a longtime, enthu-
siastic VHF/UHF and satellite operator, and one of our most frequent
Best Fist winners.

As always, SKN on OSCAR is simple and informal. Just operate CW
through one or more satellites on 1 January 2012 (0000 to 2400 UTC),
using a straight hand key.

There is no need to send in a log, but all participants are encour-
aged to nominate someone they worked for Best Fist. Your nominee need
not have the best fist of anyone you heard, only of those you worked.
Send your nomination to w2rs@amsat.org. A list of those nominated will
appear in ANS in early February.

[ANS thanks Ray Soifer, W2RS for the above information]

/EX

SB SAT @ AMSAT $ANS-338.07
This Week 50 Years Ago: OSCAR 1 Announcement for December 5, 1961

AMSAT News Service Bulletin 338.07
From AMSAT HQ SILVER SPRING, MD.
December 4, 2011
To All RADIO AMATEURS
BID: $ANS-338.07

The AMSAT News Service is re-running the Project OSCAR Newsletters to commemorate the 50th anniversary of OSCAR 1. During the November/ December 2011 time frame you will be able to share the excitement of the launch campaign that started it all 50 years ago.

The Newsletters were hand-typed back in 1961. Thanks to Don Ferguson, KD6IRE for scanning the original documents announcing OSCAR 1.

<Begin Commemorative Message>

O S C A R N E W S L E T T E R

December 5, 1961

Flash! Air Force to orbit Oscar I satellite! The U. S. Air Force has invited the Oscar satellite aboard a Discoverer vehicle which will be launched on a north-south polar orbit this month! The Oscar Association made this news release on November 15th. A Department of Defense News Release (November 15, 1961) conveys this information, and a letter from Dr. J. V. Charyk, Under Secretary of the Air Force to the American Radio Relay League proffers the formal invitation.

LAUNCH DATE IS VERY CLOSE AT HAND! Listen to the Voice of America News Broadcasts and the official ARRL broadcasts from WIAW. Watch your local newspaper. Launch flash will be carried by Associated Press and United Press news service to local radio and television stations! It is hoped that Oscar 1 will be launched before the Christmas Holidays!

Latest Oscar News:

In last minute preparation for an early launch, the second Oscar I package (serial #2) has been completed, tested and is now ready for launch if needed.

The transmitter, Keyer, Batteries, Turn-on mechanism, antenna, etc. were installed in the flight-version gold plated housing and the completed unit was checked out. All environmental tests were conducted including 50 G's of shock in all planes, 15 G's vibration, 250,000 feet of altitude, heat and cold, etc. All tests were passed with flying colors. Finally, the final thermal striping was applied and the complete package was turned over to the Discoverer project individual who will arrange for its official acceptance.

This new package will be flown by special messenger to Vandenburg AFB (north of Los Angeles) and will be installed on Discoverer XXXVI, replacing the Oscar I (Serial #1) package presently on the vehicle. Serial #1 unit will serve as the spare (standby) package.

Oscar I (Serial #3) is progressing under full steam. Chuck Smallhouse, WAGMGZ, states that this new, improved unit will deliver about 300 milliwatts of r.f. power for the same input power used in the earlier models. In addition, keying characteristics are

improved, and the slight keying chirp of #1 and #2 is absent. Serial #3 has already operated for 4 hours at a temperature of 100°C with no ill effects. This unit should be available within a few weeks as a ready-to-launch package!

Last Minute Preparations

Sunday, December 3, 1961 (2000 GMT) saw a "dry run" of the Oscar 1 sideband communications network. The remote tracking stations at various locations checked into the Oscar Communications Center (KBQEZ). Frequencies of 21.410 mc and 14.285 mc were used. WAABY and KANAA served as the east coast liaison point and two practice messages were successfully handled with remote tracking stations. Congratulations to all!

The Official Call of the Oscar 1 Satellite is W6EE. Because the transmitter is unattended, and also because of the extra circuitry required to send the call, a waiver has been obtained from the F.C.C., permitting the satellite to transmit without the use of the call. It is hoped that it will be possible to modify future packages to sign W6EE.

Tom Lott, VEZAGF/W6 (Director of Communications) asks that Orbital data and/or sighting reports for transmission to the Oscar Communications Center should be radioed or phoned into the nearest traffic net (see November, 1961 QST for net director) or to your S.C.M. (see early pages of any QST). The message should be addressed to OSCAR, Box 183, Sunnyvale, California, U. S. A.

Remember! A written back-up message should also be sent via air-mail to the same address. (See September, 1961 QST, pages 18 and 46 for details.) Once again, may we stress that the launch date is very close at hand. You must be prepared now to monitor 145 mc. Notify your amateur friends and pass the word via your local radio club that OSCAR I will soon be launched. Once you hear of the actual launch, 24-hour a day monitoring of the frequency is requested until orbit parameters are established. Frequency of the beacon transmitter is close to 145 mc: actual frequency is dependent upon temperature of the satellite - and other factors, and will be announced as soon as it is determined. Keep watch over plus or minus 50 kilocycles of the center frequency of 145 mc. Notify the Oscar Association of frequency and time of passage as soon as you hear the "bird".

Remember! The USAF and the Oscar Association have now done all that can be done. The rest is up to YOU! This unique experiment can bring added prestige and glory to amateur radio, and strengthen the cause of our great hobby in a time when all available support is sorely needed. YOUR cooperation is urgently requested. Take part in this great adventure into outer space.

<End of Commemorative Message>

[ANS thanks Don Ferguson, KD6IRE and Project OSCAR for the above information]

/EX

SB SAT @ AMSAT $ANS-338.08
AMSAT-DL Receives Mars Science Laboratory

AMSAT News Service Bulletin 338.08
From AMSAT HQ SILVER SPRING, MD.
December 4, 2011
To All RADIO AMATEURS
BID: $ANS-338.08

Radio Amateurs have received signals from the NASA Mars Science Laboratory using the AMSAT-DL amateur radio facility at Bochum in Germany.

Just over 7 hours after launch at 21:45 UTC the X-band telemetry signal from the MSL was received using the Bochum amateur radio facility. The signal, received at a distance of 112,000 km, had a spin-modulation of +/- 3.5 Hz, 2 revolutions / minute.

This is believed to be the first reception of the MSL outside the official NASA Deep Space Network (DSN).

For reception of MSL James Miller, G3RUH remotely reconfigured the Bochum tracking and receiving system. The MSL X-Band telemetry signal was received automatically in Bochum, no-one had to be physically on-site. This shows how flexible and reliable the system at Bochum is, ready for the planned AMSAT-DL P5-A mission to Mars.

James says the Bochum Antenna is used to receive lots of the NASA spacecraft all the time. Stereo-A/B is heard every day, and when they have gone LOS, he checks Grail-A and Grail-B and also Juno.

Reception of MSL required adding its trajectory data to the spacecraft database, and the frequency to the radio control computer. Provided the given frequency is with +/- 40 kHz of the actual frequency, Bochum can lock onto it in 1 sec via an FFT acquisition process. As it happens, the actual frequency was within 8 kHz of the DSN channel center, so finding it was immediate.

Congratulations to the AMSAT-DL team on a remarkable achievement.

Control Software for the Bochum Radio Telescope by James Miller G3RUH: http://www.amsat.org/amsat/articles/g3ruh/126.html

Stereo A/B Spacecraft Telemetry Reception at Bochum by James Miller, G3RUH http://www.amsat.org/amsat/articles/g3ruh/127.html

AMSAT-DL in Google English http://tinyurl.com/AMSAT-DL

[ANS thanks James Miller, G3RUH, AMSAT-DL, and AMSAT-UK for the above information]

/EX

SB SAT @ AMSAT $ANS-338.09
Explorer-1 [Prime] Renamed to Honor Former Director

AMSAT News Service Bulletin 338.09
From AMSAT HQ SILVER SPRING, MD.
December 4, 2011
To All RADIO AMATEURS
BID: $ANS-338.09

BOZEMAN - The Montana State University satellite that has been orbiting the Earth since Oct. 28 has been renamed to honor the late William Hiscock, who was director of the Montana Space Grant Consortium until his death in 2009.

Directors of the MSGC and MSU's Space Science and Engineering Lab announced Friday, Nov. 4, that the satellite originally called Explorer-1 [Prime] will now be called the William A. Hiscock Radiation Belt Explorer. The satellite that involved approximately 125 students over five years will be known more familiarly as The Hiscock Radiation Belt Explorer (HRBE).

Students, staff and faculty who attended the Nov. 4 dedication ceremony also learned that the satellite whose mission is to study the Van Allen Radiation Belts has already passed through an intense band of energetic electrons bombarding Earth's upper atmosphere over Alaska. HRBE sent that information back to students who monitor the satellite from MSU's Space Operations Center. It is Montana's first satellite. It was designed, built and is now operated by MSU students.

The full press release can be viewed on-line at:
http://www.montana.edu/cpa/news/nwview.php?article493

[ANS thanks Montana State University and CQ VHF Magazine for the above information]

/EX

SB SAT @ AMSAT $ANS-338.10
Satellite Shorts From All Over

AMSAT News Service Bulletin 338.10
From AMSAT HQ SILVER SPRING, MD.
December 4, 2011
To All RADIO AMATEURS
BID: $ANS-338.10

+ A link to the annual President's Report from the 2011 AMSAT Symposium and General Meeting has been added to the front page news items at: http://www.amsat.org.

+ In addition to the ARRL interviews at the 2011 Symposium of AMSAT Officers and Lance Ginner from Project OSCAR another interesting interview with Carroll Swain, W7DU has been posted. Carroll is a

long time AMSAT Member and is still going strong at 98.5 years
young. He is a regular on the AMSAT 20 Meter Net and brings his wife
with him to the annual AMSAT Space Symposium each year. Watch at:
http://youtu.be/uY3cDl8aQZU (via Keith, W5IU)

+ Additional coverage of AMSAT-DL receiving MSL was published in
The Register:
http://www.theregister.co.uk/2011/11/28/radio_hams_curiosity_signals/

+ Astronomers at the Sir Thomas Brisbane Planetarium in Australia
made a time-lapse movie of the MSL as it departs Earth on its
way to Mars: http://tinyurl.com/d64oezy (UniverseToday.com)

+ Video: Curiosity Rover Launches to Mars has been posted on the
UniverseToday site at: http://tinyurl.com/7e48slu

+ To celebrate the 75th Anniversary of the CBC/Radio Canada, Canadian
Amateurs may use the following prefixed between December 1-31, 2011:
VG for VA,
VX for VE,
XJ for VO,
XK for VY.

+ Bobby Lacey, KF4GTA posted photos from his opportunity to spend
3 hours inside of Atlantis on November 18:
http://www.dropbox.com/gallery/42374/1/kf4gta-atlantis?h7bde
He was also present for the shuttle's last launch and landing,
STS-135. (via Southgate ARC)

[ANS thanks everyone for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the
President's
Club. Members of the President's Club, as sustaining donors to AMSAT
Project
Funds, will be eligible to receive additional benefits. Application
forms
are
available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

163. Weekly Highlights of Solar and Geomagnetic Activity, 28 November - 04 December 2011

Newsgroup: rec.radio.amateur.space
Date: 2011-12-06 22:30:07 UTC
From: SWPC.Webmaster@noaa.gov
Message-ID: <20111206223001.F1F6933C7E@panix2.panix.com>
Source record: 289
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.info

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:Product: Weekly Highlights and Forecasts
:Issued: 2011 Dec 06 1957 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
# Weekly Highlights and Forecasts
#
Highlights of Solar and Geomagnetic Activity
28 November - 04 December 2011

Solar activity was low all week. On average, seven small and
magnetically simple spotted regions were present at any given time
during the period. Of these, Region 1363 (S22, Lo=108,
class/area=Eki/430 on 04 December) was the most productive, with
five C-class flares and 4 optical flares to its credit. It appeared
on the disk on 29 November as a small Hsx-alpha group and ended the
period as the largest and most magnetically complex (beta-gamma)
group on the disk. Despite its size and complexity, Region 1363 did
not produce the largest x-ray flare of the week. That honor belongs
to Region 1362 (N08, Lo=131, class/area=Eso/220 on 03 December)
which produced C4 04/1615Z. The second largest x-ray flare of the
period, a C3 from Region 1364 (N18, Lo=105, class/area=Hsx/60 on 30
November) occurred on 30/2028Z. At least one CME was observed each
day in coronagraph imagery, mostly attributed to filament eruptions.
None of the CMEs had any significant geoeffective component.

The greater than 10 MeV protons at 10 pfu exceeded threshold during
the period. The event began at 26/1125Z, reached a maximum flux of
80 pfu at 27/0125Z and ended at 28/0145Z. This event was associated
with a filament eruption observed early on 26 November.

The greater than 2 MeV electron flux at geosynchronous orbit was at
normal levels 28 November - 01 December and at moderate levels on 27
November and 02 - 03 December.

The geomagnetic field on 27 November was at quiet to unsettled
levels, with isolated high latitude active periods. The disturbed
conditions were caused by a CIR in advance of a weak CH HSS. Most of
28 November was quiet. A 45 nT Sudden Impulse at the Boulder
magnetometer at 28/2154Z signaled the arrival of a CME from 26
November. Unsettled to minor storm periods followed at all
latitudes. Quiet to unsettled levels, with isolated high latitude
```

active periods, returned by midday on 29 November and lasted until early on 03 December. The exception was the latter half of 30 November when a solar sector boundary crossing and prolonged southward IMF Bz triggered minor to major storm periods at high latitudes. Active to minor storm conditions were also observed at high latitudes between 03/0900-1500Z with the passage of a transient feature. The field returned to quiet to unsettled levels for the remainder.

Forecast of Solar and Geomagnetic Activity
07 December - 02 January 2012

Solar activity is expected to be at predominately low levels with a chance for isolated M-class activity through the forecast period

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at normal to moderate levels the entire forecast period

The geomagnetic field is expected to be at mostly quiet to unsettled levels through most of the forecast period. Coronal hole high speed streams are expected to bring active conditions on 14 November and again on 26-29 December.

164. Want to schedule a school contact with the ISS?

Newsgroup: rec.radio.amateur.space
Date: 2011-12-08 18:16:44 UTC
From: ARRL Education Services <memberlist@www.arrl.org>
Message-ID: <20111208165220.E7D7824781@bmail.arrl.org>
Source record: 290
Cross-posted to: rec.radio.amateur.moderated,rec.radio.amateur.space,rec.radio.info

Greetings!

In case you missed the recent announcement, here's the information you'll need if you're thinking about applying for a scheduled Amateur Radio contact with the ISS through the ARISS program. Proposals are currently being accepted for contacts to be scheduled during the 2nd half of 2012. Here's the news story: www.arrl.org/news/apply-now-to-host-a-real-time-conversation-with-crewmembers-onboard-the-iss.

Read more about the ARISS program at: http://www.arrl.org/amateur-radio-on-the-international-space-station.

Following is a list of states that have never participated in a contact with the ISS through the ARISS program: Arkansas, Connecticut, Delaware, Kansas, Minnesota, North Dakota, Rhode Island, South Dakota, Vermont, West Virginia, Wyoming, American Samoa, Guam, Northern Marianas Islands, and the Virgin Islands. ARISS would love to receive proposals from schools in these states and territories!

Debra Johnson, K1DMJ

Education Services Manager

ARRL, the national association for Amateur Radio(tm)

225 Main Street

Newington, CT 06111-1494

(860) 594-0296

Fax: (860) 594-0259

djohnson@arrl.org <mailto:djohnson@arrl.org>

165. Radio Meteor Obs. Bull. November 2011

Newsgroup: rec.radio.amateur.space
Date: 2011-12-08 19:58:08 UTC
From: Chris Steyaert <observations@rmob.org>
Message-ID: <5l52e75jncjti7e83ofiidbreoeslt5dhp@4ax.com>
Source record: 291
Cross-posted to: rec.radio.amateur.space,sci.astro.amateur

Radio Meteor Observation Bulletin No. 220 of November 2011 (78 K) is available now as

http://www.rmob.org/rmobtext/rmob1110.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

Chris

166. Radio Meteor Obs. Bull. November 2011 Correction

Newsgroup: rec.radio.amateur.space
Date: 2011-12-08 20:10:50 UTC
From: Chris Steyaert <observations@rmob.org>
Message-ID: <kd62e7ti01mgm10r4epk9olo9f6rpf1pe0@4ax.com>
Source record: 292
Cross-posted to: rec.radio.amateur.space,sci.astro.amateur

Radio Meteor Observation Bulletin No. 220 of November 2011 (78 K) is available now as

http://www.rmob.org/rmobtext/rmob1111.txt

More information and the visual presentation of the hourly forward scatter counts can be found on

http://www.rmob.org

Chris

167. ANS-345 AMSAT News Service Weekly Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2011-12-11 14:54:44 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <001501ccb814$cd036430$670a2c90$@net>
Source record: 293
Cross-posted to: rec.radio.amateur.space,rec.radio.info

AMSAT NEWS SERVICE
ANS-345

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* Radio Club of America Names AMSAT's Tom Clark K3IO Fellow
* This Week 50 Years Ago: OSCAR 1 Launched December 12, 1961
* AO-27 Scheduler Data Update
* IARU Coordination Request for Kagawa University Tethered Satellite
* ISS Sp-Ex Shadow Beacon Experiment Postponed to May-June 2012
* SKN On OSCAR 2012 In Memory Of W1JSM
* Pacific Islands Activation on Satellites
* ARISS UPDATE
* Delfi-n3Xt Satellite Includes Amateur Linear Transponder
* Doug Loughmiller, W5BL Appointed AMSAT JOURNAL Editor
* Mark Hammond, N8MH Appointed AMSAT VP-Educational Outreach

SB SAT @ AMSAT $ANS-345.01
Radio Club of America Names AMSAT's Tom Clark K3IO Fellow

AMSAT News Service Bulletin 345.01
>From AMSAT HQ SILVER SPRING, MD.
December 11, 2011
To All RADIO AMATEURS
BID: $ANS-345.01

Radio Club of America Names AMSAT's Tom Clark K3IO Fellow

At its annual Awards Banquet held this year at the Texas Motor Speedway near Fort Worth November 19th, the Radio Club of America honored AMSAT's Tom Clark, K3IO, by elevating him to the rank of Fellow in that prestigious organization.

The Radio club of America is the oldest radio club in the World, dating back to 1909. Among its members have numbered such notables as Major Edwin H. Armstrong, the inventor of the superheterodyne circuit, the super-regenerative detector and the system

of Frequency Modulation still used today for police, fire and most other two-way radio communication as well as broadcasting. Other Radio Club of America members included Fred M. Link, an early two-way radio equipment manufacturer, David Sarnoff of RCA and Senator Barry Goldwater, K7UGA.

Next year's Awards Banquet will revert back to its customary venue, the New York Athletic Club in New York City.

[ANS thanks Bill Tynan, W3XO, AMSAT Life Member No. 10 and Radio Club of America Fellow for the above information]

/EX

SB SAT @ AMSAT $ANS-345.02
This Week 50 Years Ago: OSCAR 1 Launched December 12, 1961

AMSAT News Service Bulletin 345.02
>From AMSAT HQ SILVER SPRING, MD.
December 11, 2011
To All RADIO AMATEURS
BID: $ANS-345.02

This Week 50 Years Ago: OSCAR 1 Launched December 12, 1961

The AMSAT News Service is re-running the Project OSCAR Newsletters to commemorate the 50th anniversary of OSCAR 1. During the November/ December 2011 time frame you will be able to share the excitement of the launch campaign that started it all 50 years ago.

The Newsletters were hand-typed back in 1961. Thanks to Don Ferguson, KD6IRE for scanning the original documents announcing OSCAR 1.

<Begin Commemorative Message>

O S C A R N E W S L E T T E R

December 12, 1961

OSCAR SATELLITE IN ORBIT
OSCAR SATELLITE IN ORBIT
OSCAR SATELLITE IN ORBIT

At 2041 GMT, 12 December 1961 the Oscar satellite was hurled into orbit by the Discoverer XXXVI launching vehicle from Vandenberg Air Force Base, California. The satellite immediately went into a North-South orbit and was picked up loud and clear by the hams at KC4USB (Marie Byrd Base) at the South Pole a few minutes after launch. The word was quickly relayed back to the Oscar Tracking Station, K6QEZ, by W4ABY. Acquisition was also obtained by hams at Kodiak, Alaska and by KH6UK in Hawaii on the first pass.

Oscar is on a frequency between 144.990 and 145.008 and has tremen-dous c.w. signal strength on a direct, overhead pass! Tracking re-

ports have begun to flow into the Center. W1AW heard the first pass S9 over the East coast.

The following telegram was received by the Center from the RSGB: OSCAR HEARD 0055 GMT X KEYING OK X STRENGTH NINE PLUS X DOPPLER SEVEN KC X FURTHER DATA AIR HAIL X.

Orbit is being computed, but insufficient time has elapsed to permit predictions to be made of time Oscar will pass over your area. Listen to W1AW and the Voice of America for orbital predictions. Continuous 24-hour a day monitoring is essential until predictions are established. In fact, this monitoring is urged to check for unpredicted reception at times when the Oscar satellite is theoretically out of range! Our thanks to the Air Force and men of Vandenburgh AFB who helped to make this historic milestone possible!

Actual launch was attended by W6SAI, K6LFH, W6MLZ and W0TSN. Full Oscar story in February QST and CQ and more details in our next news letter!

LISTEN T0 OSCAR! 'SEND ALL REPORTS TO PROJECT OSCAR, BOX ---, SUNNYVALE, CALIFORNIA, U.S.A.

<End of Commemorative Message>

[ANS thanks Don Ferguson, KD6IRE and Project OSCAR for the above information]

/EX

SB SAT @ AMSAT $ANS-345.03
AO-27 Scheduler Data Update

AMSAT News Service Bulletin 345.03
>From AMSAT HQ SILVER SPRING, MD.
December 11, 2011
To All RADIO AMATEURS
BID: $ANS-345.03

AO-27 Scheduler Data Update

The AO-27 web site remains offline due to connectivity problems. AO-27 Control Station, Mike Wyrick, NU3C provided the latest data files for the Java-based AO-27 Satellite Scheduler website maintained by George Henry, KA3HSW.

George has uploaded them to the AO-27 Satellite Scheduler website so that users of the Java scheduler program can update their files. Simply download them to the same folder that the Scheduler resides in. DO NOT use the "Update Data" option from within the program, as it will try to connect to the AO-27 website, which is still down.

The Java AO-27 Satellite Scheduler website is:
http://sites.google.com/site/ao27satelliteScheduler/

[ANS thanks George Henry, KA3HSW for the above information]

/EX

SB SAT @ AMSAT $ANS-345.04
IARU Coordination Request for Kagawa University Tethered Satellite

AMSAT News Service Bulletin 345.04
>From AMSAT HQ SILVER SPRING, MD.
December 11, 2011
To All RADIO AMATEURS
BID: $ANS-345.04

IARU Coordination Request for Kagawa University Tethered Satellite

The IARU Satellite Frequency Coordination pages hosted by AMSAT-UK have posted information regarding a new tethered satellite named STARS-II which will be built by students at Kagawa University in Japan.

STARS-II consists of Mother Satellite (MS) and Daughter Satellite (DS) connected by tether. The mission will include formation flight, tether deployment, attitude control and photographing each other.
1. Mother Satellite deploys tether with Daughter Satellite at end;
2. Daughter Satellite robotically controls attitude of CCD camera;
3. Mother Satellite and Daughter Satellite communicate via Bluetooth.

Proposed frequencies are:

80mW CW beacon
Mother Satellite: 437.245 MHz
Daughter Satellite: 437.255 MHz

800mW AX25 1200bps FM telemetry downlink
Mother Satellite: 437.405MHz
Daughter Satellite: 437.425MHz

Telemetry formats have been published at:
http://stars1.eng.kagawa-u.ac.jp/english/STARS-II_telemetry_format.html

Plans include a launch to a 600-800km sun synchronous orbit in the 2011-2012 timeframe.

An English version of STARS-II web page can be found at:
http://stars1.eng.kagawa-u.ac.jp/english/index.html

The IARU Coordination request can be seen on AMSAT-UK web:
http://www.amsatuk.me.uk/iaru/formal_detail.php?serialnum=170

[ANS thanks Kagawa University and AMSAT-UK for the above information]

/EX

SB SAT @ AMSAT $ANS-345.05
ISS Sp-Ex Shadow Beacon Experiment Postponed to May-June 2012

AMSAT News Service Bulletin 345.05
>From AMSAT HQ SILVER SPRING, MD.
December 11, 2011
To All RADIO AMATEURS
BID: $ANS-345.05

ISS Sp-Ex Shadow Beacon Experiment Postponed to May-June 2012

Word has been received from Russia that the ISS Shadow-Beacon Experiment announced in ANS-324 has been postponed until the May-June 2012 timeframe. This will give time for a new amateur transceiver to be delivered to the ISS by cargo vehicle and give the crew more time to prepare for the experiment. The SpEx website is: http://knts.tsniimash.ru/Shadow/en/

[ANS thanks TSNIIMASH for the above information]

/EX

SB SAT @ AMSAT $ANS-345.06
SKN On OSCAR 2012 In Memory Of W1JSM

AMSAT News Service Bulletin 345.06
>From AMSAT HQ SILVER SPRING, MD.
December 11, 2011
To All RADIO AMATEURS
BID: $ANS-345.06

You are cordially invited to participate in Straight Key Night on OSCAR 2012, conducted by AMSAT for all radio amateurs throughout the world. This year's event is dedicated to the memory of Don Brown, W1JSM, who passed away in 2011, aged 90. Don was a longtime, enthusiastic VHF/UHF and satellite operator, and one of our most frequent Best Fist winners.

As always, SKN on OSCAR is simple and informal. Just operate CW through one or more satellites on 1 January 2012 (0000 to 2400 UTC), using a straight hand key.

There is no need to send in a log, but all participants are encouraged to nominate someone they worked for Best Fist. Your nominee need not have the best fist of anyone you heard, only of those you worked. Send your nomination to w2rs@amsat.org. A list of those nominated will appear in ANS in early February.

[ANS thanks Ray Soifer, W2RS for the above information]

/EX

SB SAT @ AMSAT $ANS-345.07
Pacific Islands Activation on Satellites

AMSAT News Service Bulletin 345.07
>From AMSAT HQ SILVER SPRING, MD.

December 11, 2011
To All RADIO AMATEURS
BID: $ANS-345.07

Pacific Islands Activation on Satellites

The Ohio/Penn DX Bulletin No. 1039 released on December 5, 2011
says that two satellite operations are planned from islands in
the Pacific Ocean:

JD1, OGASAWARA. Makoto, JI5RPT, will once again be active as JD1BLY
from Chichijima Island (AS-031), Ogasawara, between December 24th
and January 2nd, 2012. Activity will be on 80-6 meters, including
the satellites, using CW, SSB and the Digital modes (NO 6m EME).
QSL via his home callsign JI5RPT. His log search will be available
on his Web site at: http://www.ji5rpt.com/jd1
He will also use Twitter to inform his real-time activities at:
http://twitter.com/jd1bly

KH0, MARIANA ISLANDS. Operators Buchi, JO3FRH and Masa, JE4SMQ will
be active as KH0UY and KH0K, respectively, from Saipan, Northern
Mariana Islands between January 7-10th, 2012. Activity will be on
80-6 meters, plus the satellites. QSL via their home callsigns,
direct or by the Bureau.

[ANS thanks The Ohio/Penn DX Bulletin for the above information]

/EX

SB SAT @ AMSAT $ANS-345.08
ARISS UPDATE

AMSAT News Service Bulletin 345.08
>From AMSAT HQ SILVER SPRING, MD.
December 11, 2011
To All RADIO AMATEURS
BID: $ANS-345.08

1. Upcoming School Contact

Nuvviti School in Ivujivik Nunavik, Quebec, Canada succeeded with
Amateur Radio on the International Space Station (ARISS) contact on
Monday, December 5 at 18:10 UTC via station WH6PN in Hawaii. Students
formed a space club and are learning about the ISS via videos, the
internet and guest speakers. They are also learning about correct radio
usage and protocol and are working on science-related projects that they
will display in the gym. First Air and the Makivik Corporation are
sponsors of the contact.

2. New Proposal Cycle for ARISS-US Contacts

NASA Teaching From Space (TFS) office recently announced a new proposal
cycle for ARISS-US contacts. The deadline for submitting proposals is
January 30, 2012 for contacts to be held in the July 15, 2012 - January

15, 2013 timeframe. TFS has received several inquiries and proposals are already coming in. An informational session will be held on Wednesday, December 7 at 12 PM CST (1800 UTC) to answer any questions concerning the proposal process. To attend the session or to have questions answered, contact TFS at JSC-TFS-ARISS@mail.nasa.gov or call 281-244-1919.
For more information, see the TFS Web site:
http://www.nasa.gov/audience/foreducators/teachingfromspace/students/ariss.html

Also see the ARRL article (includes dates for future information sessions):
http://www.arrl.org/news/apply-now-to-host-a-real-time-conversation-with-crewmembers-onboard-the-iss

3. AMSAT News Service Covers ARISS

On Sunday, December 4, AMSAT (Radio Amateur Satellite Corporation) News Service bulletin (ANS-338) included a status on ARISSat-1.
"ARISSat-1/KEDR Orbit Losing 1.5 KM Per Day" may be found at:
http://amsat.org/pipermail/ans/2011/000572.html

4. Amateur Radio Newsline Covers ARISS

On December 2, the Amateur Radio Newsline Report 1790 posted a story about ARISSat re-entering Earth's atmosphere. The article, "Ham Radio in Space: ARISSat-1 Approaching Last Days On-Orbit," may be viewed at:
ftp://ftp.arnewsline.org/quincy/News/news.txt

[ANS thanks Carol, KB2LBI, for the
above information]

/EX

SB SAT @ AMSAT $ANS-345.09
Delfi-n3Xt Satellite Includes Amateur Linear Transponder

AMSAT News Service Bulletin 345.09
>From AMSAT HQ SILVER SPRING, MD.
December 11, 2011
To All RADIO AMATEURS
BID: $ANS-345.09

Delfi-n3Xt Satellite Includes Amateur Linear Transponder

Delft University of Technology in the Netherlands has announced their new 3U Cubesat mission, Delfi-Next mission, or Delfi-n3Xt, scheduled for launch in September, 2012 on-board a Dnepr rocket. Delfi-n3Xt is the successor to the Defli-C3, DO-64 flight launched in 2008.

The good news for amateur radio operators is that Delfi-n3Xt includes a linear transponder service as a return favour since the radio amateur community allows Delfi to use their frequencies.

The Delft frequency coordination request on the IARU page says that the linear transponder uplink and downlink frequencies are the same as those used on the earlier DO-64 mission:

Uplink: 435.570 - 435.530 MHz
Downlink: 145.880 - 145.920 MHz (inverting) 400mW PEP

Using the Delft RASCAL software amateur radio groundstations have been able to receive the telemetry downlink from DO-64 and automatically forward the data to a server at Delft University. This software is JAVA based and runs on multiple platforms. The software and installation instructions are available from Delft University at: http://tinyurl.com/cg3qs8j (delfispace.nl)

Scientific, Technological, and Engineering, goals of the Delfi-n3Xt mission include:

+ Hands-on education and training of students
+ On-orbit configurable, high-efficiency transceiver platform
+ Development on the nano-satellite spacecraft bus
+ Attitude control with an on-board micro-propulsion system
+ Onboard experiment on hydrogenated amorphous silicon solar cells from the micro-electronics institute DIMES from the TU Delft.
+ Experimental S-band transmitter 2401.500 MHz downlink
+ Single-Point-Of-Failure-free OnBoard Computer (OBC)
+ Robust Command and Data Handling System, with significant less Bit-Error-Rate (BER) and more failure tolerance than on Delfi-C3.

The Delfi web pages can be found at:
have a look at: http://www.delfispace.nl/

The IARU Satellite Frequency coordination page can be found at:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=138

[ANS thanks Jan PE0SAT, and the TU-Delft Delfi-n3Xt Team for the above information]

/EX

SB SAT @ AMSAT $ANS-345.10
Doug Loughmiller, W5BL Appointed AMSAT JOURNAL Editor

AMSAT News Service Bulletin 345.10
>From AMSAT HQ SILVER SPRING, MD.
December 11, 2011
To All RADIO AMATEURS
BID: $ANS-345.10

AMSAT President Barry Baines, WD4ASW has announced the appointment of Doug Loughmiller, W5BL as the new editor of the AMSAT Journal effective 1 JAN 12. Doug takes the reins from Ed Long, WA4SWJ who has served as editor for over seven years. Barry noted, "Ed has done a masterful job of producing the Journal, creating a magazine that is well designed and well regarded within the amateur radio community. After such a long stint as editor, Ed has decided that it is time for new blood."

Doug, W5BL is returning to 'active duty' within AMSAT. A former President of AMSAT, Doug brings knowledge of AMSAT and its storied history coupled with a desire to help AMSAT now that he has time to support AMSAT once again. Doug is looking for articles for publication, so feel free to contact him with material for inclusion in the Journal. If you've been active on the satellites, represented AMSAT at hamfests or club meetings, or done some home brewing of satellite equipment, and would like to write an article of your experiences, Doug is anxious to hear from you.

[ANS Thanks WD4ASW, Barry, for the above information]

/EX

SB SAT @ AMSAT $ANS-345.11
Mark Hammond, N8MH Appointed AMSAT VP-Educational Outreach

AMSAT News Service Bulletin 345.11
>From AMSAT HQ SILVER SPRING, MD.
December 11, 2011
To All RADIO AMATEURS
BID: $ANS-345.11

AMSAT President Barry Baines, WD4ASW has announced the appointment of Mark Hammond, N8MH as AMSAT Vice President-Educational Relations. Barry noted, "The subject of educational outreach was well discussed at the 2011 AMSAT Symposium, based upon the paper that I presented as well as other presentations that outlined some of the challenges that AMSAT has experienced in creating a structure for fulfilling our mission component regarding education. Mark has agreed to help AMSAT establish and coordinate an education initiative program and serve as AMSAT's senior point of contact with outside organizations regarding educational outreach."

Given the increasing importance of fulfilling education goals as justification for launch opportunities, this is an increasingly important subject for AMSAT. Mark is aptly suited for this position as he is a professor of biology and the Dean of the College of Arts and Sciences at Campbell University, Buies Creek, NC and is very familiar with the potential for using the amateur radio satellites as a teaching resource and understands the teacher perspective as well.

[ANS Thanks WD4ASW, Barry, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Dee Interdonato, NB2F

168. Weekly Highlights of Solar and Geomagnetic Activity, 05 - 11 December 2011

Newsgroup: rec.radio.amateur.space
Date: 2011-12-13 22:30:06 UTC
From: SWPC.Webmaster@noaa.gov
Message-ID: <20111213223001.5248933C91@panix2.panix.com>
Source record: 294
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.info

```
:Product: Weekly Highlights and Forecasts
:Issued: 2011 Dec 13 1738 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
# Weekly Highlights and Forecasts
#
Highlights of Solar and Geomagnetic Activity
05 - 11 December 2011

Solar activity was at predominantly low levels for the summary
period. From 05 - 06 December, two regions dominated the disk in
size and solar flare production, Region 1363 (S21, L=108,
class/area=Eki/620 on 05 December) and Region 1362 (N08, L=131,
class/area=Eso/220 on 03 December). Both regions produced multiple
C-class events with Region 1363 responsible for the largest event of
the period, a C6/Sf flare at 05/2325 UTC. From 07 - 10 December,
Region 1374 (S17, L=352, class/area=Dso/210 on 11 December) and
Region 1375 (N08, L=356, class/area=Cso/140 on 11 December)
dominated the disk, each producing several small C-class events. The
only days of the summary period with activity at very low levels
were 06 and 11 December . Multiple coronal mass ejections (CMEs)
were observed throughout the week, however, none of them were
geoeffective.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at
moderate levels from 05 - 09 December. A return to background levels
was observed on 10 December.

Geomagnetic activity was at predominantly quiet levels during the
summary period. From 05 - 08 December, quiet conditions were
observed at all latitudes. On 09 December, an isolated period of
active conditions was observed at high latitudes. On 10 December,
quiet to unsettled conditions were observed as a coronal hole high
speed stream (CH HSS) moved into a geoeffective position. Solar wind
speed increased from around 330 km/s to around 500 km/s at the ACE
spacecraft and the total IMF rose to around 11 nT. Another isolated
period of active conditions was observed at high latitudes on 11
December as a result of the CH HSS effects.

Forecast of Solar and Geomagnetic Activity
14 December - 09 January 2012
```

Solar activity is expected to be at predominately low levels with a chance for isolated M-class activity from 12 - 22 December. A decrease to predominantly low levels is expected from 23 -24 December as Regions 1374 and 1375 rotate off the disk. An increase to a slight chance for M-class activity is expected on 25 December as Region 1363 returns and remain for the duration of the forecast period.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at normal to moderate levels the entire forecast period (14 December - 09 January).

Geomagnetic field activity is expected to be at mostly quiet levels from 14 - 25 December. Quiet to unsettled conditions are expected on 26 - 29 December due to effects from a recurrent CH HSS. A return to quiet levels is expected from 30 December - 04 January followed by an increase to quiet to unsettled levels on 05 - 06 January due to effects from a second recurrent CH HSS. Mostly quiet conditions are expected for the remainder of the period.

169. WSR-350 AMSAT Weekly Satellite Report

Newsgroup: rec.radio.amateur.space
Date: 2011-12-16 18:41:59 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <001b01ccbc22$559611b0$00c23510$@net>
Source record: 295
Cross-posted to: rec.radio.amateur.space,rec.radio.info

```
This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-350.S1
WSR 350 Part 1 12/16/2011

AMSAT NEWS SERVICE BULLETIN 350.S1
FROM AMSAT HQ SILVER SPRING, MD, December 16, 2011
TO ALL RADIO AMATEURS
BID: $WSR-350.S1

ARISSat-1 (Radioskaf-b) (Kedr)
Catalog number: 37772
Launch date: August 03, 2011 1843z
Launch site: International Space Station

Status: Operational

Callsign: RS01S

Current Mode(s):
Linear Transponder: U/v
Uplink: 435.758 to 435.742 MHz CW/LSB
Downlink: 145.922 to 145.938 MHz CW/USB

FM Telemetry/SSTV/Messages/ID:
Downlink: 145.950 MHz FM

Telemetry/Beacon:
Downlink: 145.939 MHz CW1
145.919 MHz CW2
145.920 MHz 1k BPSK USB
145.920 MHz 400b BPSK USB

Official Webpage:http://www.amsat.org/amsat-new/ARISSat/ARISSat.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/informal_detail.php?serialnum=89
[08112011]
=====
SO-67 SumbandilaSat
Catalog Number: 35870
Launch Date: September 17, 2009 1555z
```

Launch site: Baikonur, Kazakhstan

Status: Recovery

Callsign: ZS0SUM

Uplink: 145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=88
[09292011]
=====
DO-64 Delfi-C3
Catalog number: 32789
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

Delfi-C3 web page: http://www.delfic3.nl/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=68
[02092011]
=====
VO-52 HAMSAT
Catalog number: 28650
Launch Date: May 05, 2005 0444z
Launch site: Satish Dhawan Space Centre, India

Status: Operational
Current Mode: U/v - Indian Transponder

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.9360 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP
U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=30

To know what transponder is switched on please listen for the beacon
that is active. Each transponder has a different beacon.
[02092011]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607
Launch date: December 20, 2002 1700z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4
Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the re-
peater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
the 10 minute timer.
[02092011]
=====
AO-27 AMRAD
Catalog number: 22825
Launch date: September 26, 1993 0140z
Launch site: Kourou, French Guiana

Status: Operational

Current Mode: V/u

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[02092011]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530
Launch Date: November 15, 1974
Launch site: Vandenberg AFB, California, USA

Status: Operational

Current Mode: Alternating between Mode A and B every 24 hours

Uplink: 145.850 to 145.950 MHz CW/USB Mode A
432.125 to 432.175 MHz CW/LSB Mode B
Downlink: 29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons: 29.502 MHz CW
145.972 MHz CW
435.100 MHz CW
2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php

The AO-7 Logbook and Resource Website:
http://www.planetemily.com/ao7/
[02092011]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
Kourou, French Guiana
Uchinoura Space Center, Japan
Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - OFF
2m APRS - ON
70cm Digi - ON
SSTV - OFF

Expedition 30 Crew (November 2011 - March 2012):
Commander: Dan Burbank KC5ZSX
Flight Engineer: Anton Shkaplerov
Flight Engineer: Anatoly Ivanishin
Flight Engineer:
Flight Engineer:
Flight Engineer:

Available Modes and Frequencies:
Digital/APRS:
Worldwide 2m packet uplink: 145.825 MHz FM 1k2
Worldwide 2m packet downlink: 145.825 Mhz FM 1k2
Worldwide 70cm packet downlink: 437.550 Mhz FM 1k2
Worldwide 70cm packet downlink: 437.550 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
2m Packet Mailbox: RS0ISS-11
2m Digipeater alias: ARISS
70cm Packet Mailbox: RS0ISS-1
70cm Digipeater callsign: RS0ISS
70cm Digipeater alias: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[12062011]

NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-350.S2
WSR 350 Part 2 12/16/2011

AMSAT NEWS SERVICE BULLETIN 350.S2
FROM AMSAT HQ SILVER SPRING, MD, December 16, 2011
TO ALL RADIO AMATEURS
BID: $WSR-350.S2

JUNGU
Catalog Number:
Launch Date: October 12, 2011 05:30:00 UTC
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink: 145.??? MHz 1k2 (mode?)
Downlink: 437.505 MHz 9k6 (mode?)

Beacon: 437.275 MHz 15 wpm (?) CW

Callsign:

URL: http://www.iitk.ac.in/me/jugnu/index.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=160
[11102011]
=====
SRMSAT
Catalog Number:
Launch Date: October 12, 2011 05:30:00 UTC
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink: 145.900 MHz 1k AX.25 (speed?)
Downlink: 437.500 MHz 2k4 AX.25

Beacon: 437.425 MHz 12 wpm CW

Callsign:

URL: http://srmsat.in/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=181
[11102011]
=====
E1P Explorer 1 [Prime] CubeSat (E1P-U2)
Catalog Number:
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink: 437.305 MHz (???)
Downlink: 437.505 MHz AX.25 (SSB?)

Beacon:

Callsign:

URL: http://ssel.montana.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=116
[11102011]
=====
M-Cubed
Catalog Number:
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink:
Downlink: 437.485 MHz AX.25

Beacon:

Callsign:

URL: http://umcubed.org/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=215
[11102011]
=====
RAX-2
Catalog Number:
Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink:
Downlink: 437.345MHz 9k6 GMSK

Beacon:

Callsign:

URL: http://rax.engin.umich.edu//

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=221
[11102011]
=====
AO-71 AubieSat-1
Catalog Number:

Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink:
Downlink: 437.475 MHz 1k2 AX.25

Beacon: 437.475 MHz CW

Callsign: KI4NQO

URL: http://www.space.auburn.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=148
[11262011]
=====
O/OREOS
Catalog Number: 37224
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.035 MHZ AX.25

Beacon:

Callsign:

URL: http://www.ooreos.org/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=146
[02092011]
=====
Rax-1 Radio Aurora Explorer
Catalog Number: 37223
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Uplink:
Downlink: 437.505 MHz 9k6 GMSK

Beacon:

Callsign: RAX-1

URL: http://rax.engin.umich.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=165

[02092011]
=====
FO-69 Fastrac-1 Sara Lily
Catalog Number: 37227
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Operational

Uplink 1: 145.980 MHz 1k2 baud
Uplink 2: 145.825 MHz 1k2 baud
Downlink: 437.345 MHz 1k2 and 9k6 baud

Beacon: 437.435 MHz 1k2 AX.25

Callsign: Fast1

URL: http://fastrac.ae.utexas.edu/index.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=83
[07052011]
=====
FO-70 Fastrac-2 Emma
Catalog Number: 37380
Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Operational

Uplink 1: 435.025 MHz 1k2 baud
Uplink 2: 437.435 MHz 9k6 baud
Downlink: 145.825 MHz 1k2 and 9k6 baud

Beacon: 145.825 MHz 1k2 AX.25

Callsign: Fast2

URL: http://fastrac.ae.utexas.edu/index.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=84
[12162011]
=====
StudSat
Catalog Number: 36796
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink: 437.505MHz, 9600bps FSK
Downlink: 437.505MHz, 9600bps FSK
Beacon : 437.505MHz, 20bps ASK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=164
[02092011]
=====
TIsat-1
Catalog Number: 36799
Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On orbit

Callsign: HB9DE

Uplink: 145.980MHz FM, AFSK
Downlink: 437.305MHz FM, AFSK
Beacon: 437.305MHz CW

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=118
[02092011]
=====
HO-68 HOPE-1 (CAS-1)(XW-1)
Catalog Number: 36122
Launch Date: December 15, 2009 0231z
Launch site: Taiyuan Space Center, PRC

Status: Beacon only

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
145.9250 - 145.9750 MHz SSB/CW
145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
435.7650 - 435.7150 MHz SSB/CW
435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=108

For more information about XW-1 (CAS-1):
http://
[08112011]
=====
SwissCube
Catalog Number: 35932
Launch Date: September 23, 2009 0621z

Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w): 437.5050MHz FSK 1k2bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=109
[02092011]
=====
UWE-2
Catalog Number: 35934
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
437.3850 MHz FSK 9k6bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=110
[02092011]
=====
ITUpsAT1
Catalog Number: 35935
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=113
[02092011]
=====
BEESAT
Catalog Number: 35933
Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
Beacon(500mw): 436.000MHz GMSK 9k6bp
[02092011]

=====
CP-6
Catalog Number: 35003
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: Operational

Downlink: 437.365 MHz 1k2 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=121
[02092011]
=====
HAWKSAT 1
Catalog number: 35004
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: operational

Downlink: 437.345 MHz ?

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=105
[02092011]
=====
Pharmasat
Catalog Number: 35002
Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: Operational

Downlink: 437.465 MHz 1k2 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=94
[02092011]
=====
ANUSAT
Catalog Number: 34808
Launch Date: April 20, 2009 0115z
Launch Site: Satish Dhawan Space Centre, India

Status: ?

Downlink: 435.000 MHz
Uplink: 145.800 MHz

Telemetry: 137.400 MHz
[02092011]
=====
SOHLA-1 (ASTRO TECH.)

Catalog Number: 33496
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon: 437.505 MHz AFSK/CW

Callsign:

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=101
[02092011]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: In Orbit

Downlink: 437.375 MHZ FSK9k6/CW
Beacon: 437.375 MHz FSK9k6/CW

IARU coordination status page:

AMSAT-NA webpage:

[02092011]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational ?

Downlinks: 437.485 MHz FM/CW
437.465 MHz FM/CW
Beacons: 437.305 MHz FM/CW
437.275 MHz FM/CW

Callsigns: JR5YBN
JR5YBO

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[02092011]
=====

KKS-1 (Tokyo MCIT)
Catalog Number: 33499
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Downlink: 437.455 MHz AFSK/CW
Beacon: 437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[20092011]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493
Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational ?

Downlink: 437.425 MHz AFSK/GMSK/CW
Beacon: 437.250 MHz AFSK/GMSK/CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=97

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=119&retURL
=/satellites/status.php
[02092011]
=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953
Launch Date: May 23, 2008 1520z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Curent Modes: Telemetry
Audio
Images

Downlinks: 435.315 MHz
435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02092011]
=====
CanX-2
Catalog number: 32790
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web
page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=46
[02092011]
=====
AAUSAT-II
Catalog number: 32788
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=60
[02092011]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational ?

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL
=/satellites/status.php
[07052011]
=====
Compass-1
Catalog number: 32787
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Current Mode: dependant on last received command

Uplink: 145.980 MHz FM
Downlink: 437.275 Mhz CW
437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[06162011]
=====
CO-66 Seeds II
Catalog number:
Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web
page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL
=/satellites/status.php
[02092011]
=====
CAPE-1
Catalog Number: 31130
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Intermittent

Current Mode: /u

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=72
[02092011]
=====
CP3
Catalog Number: 31129
Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Operational

Current Mode: /u

Downlink: 436.845 MHz 1200 bps AFSK AX.25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=74
[02092011]
=====
CO-58 CubeSat XI-V
Catalog number: 28895
Launch Date: October 27, 2005 0652z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - CW Beacon only

Current Mode: /u

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=37
[02092011]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: ?????

Current Mode: /u

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[02092011]
=====
QuakeSat
Catalog Number: 27845
Launch Date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Telemetry only

Current Mode: 9600 baud data packet

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[02252011]
=====
CO-55 Cute-1.7+APD II
Catalog Number: 27844
Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Current Mode: CW downlink worldwide
AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=78
[02092011]
=====
NO-44 PCSAT
Catalog number: 26931
Launch Date: September 30, 2001 0240z
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Telemetry only

Current Mode: V/v

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[02092011]
=====
RS-22 RADIO SPORT 22 (MOZHAYETS 4)
Catalog number: 27939
Launch Date: September 27, 2003 0612z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - 70cm cw only

Current Mode: /u

CW Beacon - 435.352 MHz
145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02092011]
=====
LO-19 LUSAT
Catalog number: 20442
Launch date: January 22, 1990

Launch site: Kourou, French Guiana

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
145.860 MHz 1200-baud Manchester FSK
145.880 MHz 1200-baud Manchester FSK
145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[02092011]
=====
UO-11 OSCAR-11
Catalog number: 14781
Launch Date: March 1, 1984
Launch site: Vandenburg AFB, California, USA

Status: Operational ?

Current Mode: /v

Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon: 435.025 MHz
Mode-S Beacon: 2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[07052011]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544
Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur, Kazakhstan
Kourou, French Guiana
Uchinoura Space Center, Japan
Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Current Active Modes: FM Repeater - OFF
Voice - V/v
BBS - OFF

2m APRS - ON
70cm Digi - ON
SSTV - OFF

Expedition 30 Crew (November 2011 - March 2012):
Commander: Dan Burbank KC5ZSX
Flight Engineer: Anton Shkaplerov
Flight Engineer: Anatoly Ivanishin
Flight Engineer:
Flight Engineer:
Flight Engineer:

Available Modes and Frequencies:
Digital/APRS:
Worldwide 2m packet uplink: 145.825 MHz FM 1k2
Worldwide 2m packet downlink: 145.825 Mhz FM 1k2
Worldwide 70cm packet downlink: 437.550 Mhz FM 1k2
Worldwide 70cm packet downlink: 437.550 Mhz FM 1k2

Voice:
Region 1 voice uplink: 145.200 MHz FM
Region 2/3 voice uplink: 144.490 MHz FM
Worldwide downlink: 145.800 MHz FM

Crossband Repeater:
Repeater Uplinks: 1269.650 MHz FM
437.800 MHz FM
145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink: 145.800 MHz FM
437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink: 145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian: OR4ISS
German: DP0ISS
Russian: RS0ISS
RZ3DZR
United States: NA1SS
2m Packet Mailbox: RS0ISS-11
2m Digipeater alias: ARISS
70cm Packet Mailbox: RS0ISS-1
70cm Digipeater callsign: RS0ISS
70cm Digipeater alias: ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[12062011]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-350.S3
WSR 350 Part 3 12/16/2011

AMSAT NEWS SERVICE BULLETIN 350.S3
FROM AMSAT HQ SILVER SPRING, MD, December 16, 2011
TO ALL RADIO AMATEURS
BID: $WSR-350.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NANOSAIL-D
Catalog Number:
Ejection Date: January 17, 2011

Status: On orbit

Downlink: 437.270 MHz AX.25

URL: http://nanosaild.engr.scu.edu/dashboard.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=115
[01272011]
=====
CP4
Catalog Number: 31132
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: /u

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=79
[09062010]
=====
LIBERTAD-1
Catalog Number: 31128
Launch Date: April 17, 2007

Status: Non-Operational

Current Mode: V/u APRS Packet ax25

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=76
[09062010]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712
Launch Date: January 10, 2007

Status: Non-Operational

Current Mode: V/v

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=51
[09062010]
=====
NCUBE-2
Catalog number: 28897
Launch Date: October 27, 2005

Status: Still attached to XO-53 (SSETI)?

Proposed Callsign: TBA
Proposed Transmit Frequency: 437.305
2407.250

Official Website: http://www.ncube.no

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=24
[09062010]
=====
XO-53 SSETI
Catalog number: 28894
Launch Date: October 27, 2005

Status: Non-operational

Voice Uplink: 437.250 MHz FM 67Hz CTCSS
Voice Downlink: 2401.835 MHz FM
Packet Up/Downlink: 437.250 MHz 9k6 packet
Packet Downlink 2401.835 MHz 38k4 packet

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=54
[09062010]
=====

UWE-1
Catalog Number: 28892
Launch Date: October 27, 2005

Status: Non-Operational

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=53
[09062010]
=====
AO-51 ECHO
Catalog number: 28375
Launch date: June 29, 2004 0745z
Launch site: Baikonur, Kazakhstan

Status: Non - Operational

Current Mode(s):
Voice repeater: V/u
Uplink: 145.880 MHz FM
Downlink: 435.150 MHz FM

Telemetry: Recovery efforts
Downlink: 435.150MHz 9k6

Analog voice downlink: 435.300 MHz FM
435.150 MHz FM
2401.200 Mhz FM
Analog voice uplink: 145.860 MHZ FM
145.880 MHz USB
145.880 MHz FM
145.920 MHz FM
145.920 MHz FM - 67 Hz PL tone burst
1268.705 MHz FM
Digital Downlinks: 435.150 MHz FM 38k4 PBP, 1 watt output
435.150 MHz FM 9k6 Pacsat Broadcast Protocol
2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink: 145.860 MHz FM 9k6 Pacsat Broadcast Protocol
1268.703 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon: 435.150 MHz

Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=19
[12062011]
=====
CANX-1
Catalog Number: 27847
Launch Date: June 30, 2003

Status: Non-Operational

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842
Launch Date: June 30, 2003

Status: Non-Operational

Current Mode: 2k4 AFSK Packet last reported

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605
Launch Date: December 20, 2002

Status: Non-operational.

Uplink: 435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548
Launch date: September 26, 2000

Status: Telemetry only

Uplinks: 145.850 MHz
145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932
Launch Date: September 30, 2001

Status: Non-Operational

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD

Everyone is welcome to use the digipeating/APRS features of Sapphire,
as per the user service agreement located at the following URL:
http://web.usna.navy.mil/~bruninga/pcsat/contract.txt
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549
Launch date: September 26, 2000

Status: Non-Operational

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A
Catalog number: 26545
Launch Date: September 26, 2000

Status: Non-Operational

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609
Launch Date: November 16, 2000

Status: Non-Operational

Uplinks

V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON General Beacon(GB) Middle Beacon(MB) Engineering Beacon(EB)
2 m none 145.898 MHz none
70cm 435.438 MHz 435.588 MHz 435.838 MHz
13cm(1) 2400.188 MHz 2400.338 MHz 2400.588 MHz
13cm(2) 2401.173 MHz 2401.323 MHz 2401.573 MHz
3cm 10450.975 MHz 10451.125 MHz 10451.375 MHz
1.5cm 24047.885 MHz 24048.035 MHz 24048.285 MHz
[07162007]
=====
OO-38 OPAL
Catalog Number: 26063
Launch Date: January 27, 2000

Status: Non-Operational

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693
Launch date: April 21, 1999

Status: Unknown

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: 25636
Launch date:February 23, 1999

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520
Launch date: October 30, 1998

Status: Telemetry downloads only

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509
Launch date: October 24, 1998

Status: Semi-operational

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====

GO-32 Gurwin TechSat-1B
Catalog number: 25397
Launch Date: July 10, 1998

Status: Non-Operational

Current Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
145.890 FM
145.930 FM
1269.700 FM
1269.800 FM
1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[07172010]
=====
TO-31 TMSAT-1
Catalog number: 25396
Launch Date: July 10, 1998

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305
Launch Date: September 5, 1996

Status: Non-operational

Downlink: 435.1380 MHz AFSK 1200 BPS
Downlink: 435.2060 MHz AFSK 1200 BPS
Uplink: 145.8150 MHz AFSK 1200 BPS
Uplink: 145.8350 MHz AFSK 1200 BPS
Uplink: 145.8550 MHz AFSK 1200 BPS
Uplink: 145.8750 MHz AFSK 1200 BPS

[06042009]
=====
FO-29 JAS-2
Catalog number: 24278
Launch Date: August 17, 1996

Status: Operational
Current Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
145.870 MHz FM
145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[101432011]
=====
PO-28 POSAT-1
Catalog number: 22829
Launch Date: September 25, 1993

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
IO-26 ITAMSAT
Catalog number: 22826
Launch Date: September 26, 1993

Status: PSK carrier only

Current Mode:

Uplinks: 145.875 MHz FM 1200-baud
145.900 MHz FM 1200-baud
145.925 MHz FM 1200-baud
145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828
Launch date: September 26, 1993

Status: Non-operational

Uplink: 145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654
Launch Date: May 13, 1993

Status: Non-operational

Uplink: 435.0625 MHz FM 1k2bps AFSK
435.1125 MHz FM 1k2bps AFSK
435.1375 MHz FM 1k2bps AFSK
Downlink: 145.9750 MHz FM 1k2bps AFSK
2446.5025 MHz FM 1k2bps AFSK

Beacon: 2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT
Catalog number: 22077
Launch date: August 10, 1992

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575
Launch date: July 17, 1991

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087
Launch Date: January 29, 1991

Status: Non-Operational

Uplink: 435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480
Launch Date: February 07, 1990

Status: Non-Operational

Beacons: 435.795 MHz CW
435.910 MHz AX25

Voice Transponder:
Uplink: 145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks: 145.850 MHz

145.870 MHz
145.890 MHz
145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441
Launch Date: January 22, 1990

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440
Launch Date: January 22, 1990

Status: Non-operational.

Downlink: 145.825 MHz FM 1200 Baud AFSK
Beacon: 2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439
Launch Date: January 22, 1990

Status: non-operational

Current Mode: V/u

Uplink: 145.900 MHz FM 1200-baud Manchester FSK (reserved)
145.920 MHz FM VOICE
145.940 MHz FM 1200-baud Manchester FSK (reserved)
145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink: 437.026 MHz USB VOICE
(1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC 437.050 MHz RHCP
PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS: PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438
Launch Date: January 22, 1990

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437
Launch date: January 22, 1990

Status: Non-operational

Uplink: 145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909
Launch Date: August 12, 1986

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink: 145.8500 MHz MFSK 1200 BPS
Uplink: 145.8700 MHz MFSK 1200 BPS
Uplink: 145.8900 MHz MFSK 1200 BPS
Uplink: 145.9100 MHz MFSK 1200 BPS

Downlink 435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129
Launch Date: June 16, 1983

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703
Launch Date: March 3, 1978

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink 435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink 435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.8500 - 145.9000 MHz SSB/CW
Downlink 29.4000 - 29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink 29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236
Launch Date: October 15, 1972

Status: Non-Operational

Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink: 29.4500 - 29.5500 MHz SSB/CW
Beacons: 29.450 MHz
435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321
Launch Date: January 23, 1970

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293
Launch Date: March 09, 1965

Status: Non-Operational

Uplink: 145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW

[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439
Launch Date: December 26, 1994

Status: Non-operational

Uplink: 145.858 to 145.898 MHz CW/USB
Downlink: 29.354 to 29.394 MHz CW/USB

Beacon 1: 29.352 MHz (intermittent)
Beacon 2: 29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.260 to 21.300 MHz CW/USB
Downlink: 145.860 to 145.900 MHz CW/USB

Beacon: 145.860 MHz

Robot: 145.908 MHz
[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089
Launch date: February 5, 1991

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-350.S4
WSR 350 Part 4 12/16/2011

AMSAT NEWS SERVICE BULLETIN 350.S4
FROM AMSAT HQ SILVER SPRING, MD, December 16, 2011
TO ALL RADIO AMATEURS
BID: $WSR-350.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

CAERUS
Catalog Number:
Launch Date: December 08, 2010 15:43:00 UTC
Launch site: Kennedy Space Center, Titusville, Florida, USA

Status: Re-entered December 22, 2010

Uplink:
Downlink: 437.600 MHz 1k2 AX.25

Beacon: 437.600 MHz CW

Callsign: KJ6FIX

URL:
http://www2.isi.edu/research/prj-serc/prj-serc_projects/prj-serc_projects-8.
htm

IARU coordination status page:

[11102011]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941
Launch date: February 21, 2006

Status: Re-entered
Re-entered: October 25, 2009

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=56
[09062010]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 437.325 MHz 9k6 GMSK
437.325 MHz CW 20wpm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=117

[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35690
Launch Date: May 19, 2009

Status: Re-entered
Re-entered:

Downlink: 436.250 MHz 9k6 FHSS
[11112009]
=====
Pollux
Catalog Number: 35693
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=139
[09062010]
=====
Castor (ANDE-2)
Catalog Number: 35694
Launch Date: July 31, 2009

Status: Re-entered
Re-entered:

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=144
[09062010]
=====
NO-62 FCAL
Catalog Number: 29667
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: July 28, 2008

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=59
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: December 25, 2007

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
NO-60 RAFT-1
Catalog Number: 29661
Launch Date: December 21, 2006

Status: Re-Entered
Re-entered: May 30, 2007

Main Downlink: 145.825 Mhz FM APRS AX25
APRS Uplink: 145.825 MHz FM APRS AX25
Voice/PSK31 Uplink: 28.120 MHz

Packet to Voice ID: RAFT
[06112007]
=====
GENESAT-1
Catalog Number: 29655
Launch Date: December 16, 2006

Status: Re-Entered
Re-entered date: August 8, 2010

Current Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[08082010]
=====
HO-59 HITSat
Catalog number: 29484
Launch date: September 22, 2006

Status: Re-Entered
Re-entered: June 18, 2008

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT
[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929
Launch Date: September 30, 2001

Status: Re-Entered
Re-entered: January 21, 2003

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at} amsat.org
NNNN
/EX

170. ANS-352 AMSAT News Service Weekly Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2011-12-18 02:14:19 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <001901ccbd2a$ba0026f0$2e0074d0$@net>
Source record: 296
Cross-posted to: rec.radio.amateur.space,rec.radio.info

AMSAT NEWS SERVICE
ANS-352

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* Keep Amateur Radio in Space: Project Fox-1 Fundraising Campaign
* ARRL Teachers Institute Plans Satellite Demo on December 20
* AMSAT Awards
* This Week 50 Years Ago: OSCAR 1 in Orbit
* Silent Key: Ignacio Martinez, CE2MH, President of AMSAT-CE
* N1JEZ Adapts AMSAT-UK FUNcube Dongle as SDR Panadaptor
* Soyuz Preparations Continue for Three Ham Crew Launch to ISS
* UNISEC Announces Second Micro/Nano-Satellite Technology Idea Contest
* Satellite Shorts From All Over
* Got CubeSat? ESA January Vega Launch to Fly 6 More

SB SAT @ AMSAT $ANS-352.01
Keep Amateur Radio in Space: Project Fox-1 Fundraising Campaign

AMSAT News Service Bulletin 352.01
>From AMSAT HQ SILVER SPRING, MD.
December 18, 2011
To All RADIO AMATEURS
BID: $ANS-352.01

Letters mailed to all AMSAT members this week kicked off the Project Fox fundraising campaign. "Given the sad news on AO-51," AMSAT President Barry Baines, WD4ASW, said, "we highlighted at the recent 2011 Symposium that AMSAT is actively developing Fox-1, a new spacecraft that is designed to replace AO-51. Fox-1 development now takes on a great sense of urgency."

AMSAT Vice-President of Engineering, Tony Monteiro, AA2TX says, "Fox-1 will advance single-channel FM repeater satellite operation beyond the experience of AO-51. It will advance AMSAT to the next generation of AO-51 class satellites."

Fox-1 is designed for longer operational life with these features:

+ Fox-1 is designed to operate in sunlight without batteries once the battery system fails. This applies lessons learned from AO-51 and ARISSat-1 operations.

+ In case of IHU failure Fox-1 will continue to operate its FM repeater in a basic, 'zombie sat' mode, so that the repeater remains on-the-air.

+ Fox-1 is designed as the immediate replacement for AO-51. Its U/V (Mode B) transponder will make it even easier to work with modest equipment.

+ From the ground user's perspective, the same FM amateur radio equipment used for AO-51 may be used for Fox-1.

+ Extending the design, Fox-2 will benefit from the development work of Fox-1 by adding more sophisticated power management and Software Defined Transponder (SDX) communications systems.

Barry concluded, "AMSAT's ability to provide a replacement spacecraft and get it launched is dependent upon the active support of donors who wish to see Fox-1 fly."

Several opportunities to make your donation to keep amateur radio in space include:

+ Return the form sent with the letter to reply with your donation for the Fox-1 Project.
- All donations over $40 will receive a Fox pin.
- Donations of $120 or more qualify you for AMSAT President's Club

+ Call Martha at the AMSAT Office +1-888-FB AMSAT (1-888-322-6728)
+ Paypal donation widget on the main page at: http://www.amsat.org
+ Paypal donation widget for Project Fox at:
http://www.amsat.org/amsat-new/fox/
+ You can also go to the Paypal site and send your donation to martha@amsat.org.
+ The AMSAT Store: http://www.amsat-na.com/store/categories.php

On November 15 AMSAT submitted a proposal to NASA for their CubeSat Launch Initiative, also known as the "Educational Launch of NanoSat" (ELaNa) program. NASA selects projects that they deem to have merit in support of their strategic and educational goals. Projects that are selected will be able to enter into a collaboration agreement where NASA will cover the integration and launch costs of the satellite.

AMSAT, working with ARRL, highlighted the educational merit of the project including the incorporation of Fox-1 into the ARRL Teacher Institute seminars. ARRL also provided a letter of support for the project that was a key component of our proposal. NASA will select from all of the submissions and announce the winning projects by January 30, 2012.

The Powerpoint presentations from the 2011 AMSAT Space Symposium on the Project Fox web site provide a good overview of the technical progress: http://www.amsat.org/amsat-new/fox/

+ Fox-1 Project Overview
+ Fox-1 Mechanical Design
+ Fox-1 Thermal Design
+ Fox-1 Radiation Environment

[ANS thanks AMSAT President Barry Baines, WD4ASW, and AMSAT's Project Fox Engineering team for the above information]

/EX

SB SAT @ AMSAT $ANS-352.02
ARRL Teachers Institute Plans Satellite Demo on December 20

AMSAT News Service Bulletin 352.02
>From AMSAT HQ SILVER SPRING, MD.
December 18, 2011
To All RADIO AMATEURS
BID: $ANS-352.02

Satellite operators are invited to listen for ARRL Education and Technology Program Director, Mark Spencer, WA8SME on the afternoon pass of AO-27 (and possibly other satellites) on December 20 as he conducts an operating demonstration from the ARRL Teachers Institute at Mississippi State University. Satellite passes on December 21 are planned as backup operating times.

Mark will be covering topics regarding using space-borne systems in the classroom. He says a major part of that unit is demonstrating ham satellite contacts.

Mark will be using the call W1AW/5 for the pass. If you'd like a QSL for the contact, send an e-mail to him (mspencer@arrl.org) and he will make sure you get one.

Find out more about the ARRL Teachers Institutes on-line at: http://www.arrl.org/teachers-institute-on-wireless-technology.

[ANS thanks Mark Spencer, WA8SME for the above information]

/EX

SB SAT @ AMSAT $ANS-352.03
AMSAT Awards

AMSAT News Service Bulletin 352.03
>From AMSAT HQ SILVER SPRING, MD.
December 18, 2011
To All RADIO AMATEURS
BID: $ANS-352.03

AMSAT Director Contests and Awards, Bruce Paige, KK5DO says that con-gratulations are in order for the latest AMSAT Awards recipients.

The following have entered into the Satellite Communicators Club for making their first satellite QSO.
+ Jackson Wilson, KF5LOQ
+ Bill Caton, WD4DHJ
+ Marcelo Teruel, IK0USO
+ Mike Massell, KD0LMB
+ Kelly Bradley, KC5YPU
+ Dmitry Krylov, UA3RAB

The following have earned the AMSAT Communications Achievement Award.
+ Bill Caton, WD4DHJ, #546

The following have earned the AMSAT Sexagesimal Communications Achievement Award.
+ Wyatt Dirks, AC0RA, #162
+ George Carr, WA5KBH, #163

The following have earned the South Africa Satellite Communications Achievement Award.
+ Bill Caton, WD4DHJ, #US175
+ Demitry Krylov, UA3RAB, #US176
+ Marcelo Teruel, IK0USO, #US177

The following have earned their Robert W. Barbee, Jr. W4AMI Award
+ Wyatt Dirks, AC0RA, #75

To see all the awards visit http://www.amsat.org.

Bruce also invites everyone to check into the Houston AMSAT Net on Wednesday 0200z (Tuesday evening in North America) on Echolink - Conference *AMSAT* The net also streams MP3 at: http://www.amsatnet.com And a podcast can be downloaded from http://www.amsatnet.com/podcast.xml or iTunes.

[ANS thanks Bruce Paige, KK5DO for the above information]

/EX

SB SAT @ AMSAT $ANS-352.04
This Week 50 Years Ago: OSCAR 1 in Orbit

AMSAT News Service Bulletin 352.04
>From AMSAT HQ SILVER SPRING, MD.
December 18, 2011
To All RADIO AMATEURS
BID: $ANS-352.04

The AMSAT News Service is re-running the Project OSCAR Newsletters to commemorate the 50th anniversary of OSCAR 1. During the November/ December 2011 time frame you will be able to share the excitement of the launch campaign that started it all 50 years ago.

This week is the last installment in the replay of these historic newsletters.

The Newsletters were hand-typed back in 1961. Thanks to Don Ferguson, KD6IRE for scanning the original documents announcing OSCAR 1.

<Begin Commemorative Message>

O S C A R N E W S L E T T E R

December 21, 1961

As of December 19, 1961 (one week in orbit) the amateur radio satellite Oscar I had completed 104 revolutions about the earth on a North-South-North orbit. Reports are beginning to pour into the Oscar Headquarters. A total of 296 reports from ll foreign countries have been received, with radio messages indicating more are on the way. Mail has been delayed because of the Christmas rush, but it is hoped that future reports will reach us more rapidly. Reports have proven to be consistent and accurate enough for use in generating tracking predictions. Telemetry information provided by the keying rate indicates that Oscar I is running a fever. Recent data establishes the temperature of the package to be l25�F.

The following is a summary of the Oscar 1 satellite:

+ Frequency: Approximately 144.983 Mc. Power Output: 100+ milliwatts
+ HI-rate: Proportional to temperature. (IO HI's in 30 seconds �64�F).
+ Tumble rate: Approximately 20 seconds.
+ Apogee: (Point farthest from the earth) - Approximately 275 miles.
+ Perigee: (Point closest to the earth) - Approximately 150 miles.
+ Orbital Period: Approximately 92 minutes.
+ Total Doppler Shift: Approximately 6.5 kc.(Frequency received-is higher than transmitted when satellite is approaching your station; lower when going away).
+ Transmitter: Transistor crystal oscillator on 72.5 mc., transistor amplifier and "Veri-cap" diode doubler to 145 mc. Keyer consists of transistor multi-vibrator and counters with diode logic. Oscillator is keyed in base circuit.
+ Power Supply: Mercury batteries. Expected life of batteries: 3 to 4 weeks.
+ Antenna: 1/4-wave monopole, about 19 inches long.
+ Dimensions and weight: 12" x 10" x 8". Weight: 10 pounds.

All daytime passes are from North to South: All nighttime passes are from South to North. A preliminary review of a sample of reports for one pass provides some interesting information. The acquisition times and fade-out times correlate closely among all the receiving stations in the same area. Further, the correlations have improved noticeably for the later orbital passes. This emphasizes that operators are gaining experience and that the predictions have been sufficiently accurate to permit early acquisition.

Many amateurs have been surprised at the great range which may be spanned by this beacon, whose output power is about 1/4 that requir-

ed to light a flash-light bulb. Reports indicate reliable reception up to a distance of about 1400 miles from the satellite path. On an overhead pass, signal reports of 40 decibels above noise level are common!

The Oscar Data Reduction group has reported a few messages indicating 'that the last dot of the letter "I" has been missing. Anybody noticing this who has a tape recording of the "missing dot" is requested to air mail it to the Association as soon as possible.

Reports of the "HI" rate are urgently requested. If the temperature inside the package continues to rise, it is possible that the operating life of Oscar could be cut short by a high temperature failure of some component. The temperature rise does not seem linear, so all reports will be welcome! Also, please monitor the frequency in off-hours to determine if Oscar can be heard by unusual propagation modes at great distances!

Orbital data is being broadcast by W1AW (see QST for schedules) and by the Voice of America "Space-Warn" program on various frequencies (9.525, 11.79, 11.83, and 15.29 mc) at 0330 GMT, Monday through Saturday.

Send all reception reports of Oscar to: Project Oscar Association, Box ---, Sunnyvale, California, U.S.A.
Thanks for your splendid cooperation and keep up the good work! 73.

<End of Commemorative Message>

[ANS thanks Don Ferguson, KD6IRE and Project OSCAR for the above information]

/EX

SB SAT @ AMSAT $ANS-352.05
Silent Key: Ignacio Martinez, CE2MH, President of AMSAT-CE

AMSAT News Service Bulletin 352.05
>From AMSAT HQ SILVER SPRING, MD.
December 18, 2011
To All RADIO AMATEURS
BID: $ANS-352.05

AMSAT received the sad news that Ignacio Martinez, CE2MH, President of AMSAT-CE passed away suddenly December 9 after a brief illness. He was 73. Ignacio was founder of FEDERACHI, the Chilean Radio Amateur Federation, from where he laid the foundations to create AMSAT-CE.

There he served as President of the Board from its beginnings in 1992 until he passed away. He was the driving force behind the CESAR-1 satellite project to which Tom Clark, K3IO made a great contribution.

Ignacio is survived by his wife Patricia, two daughters and a son. A memorial service took place in Vina del Mar on Sunday, December 11. (Book of Condolences is posted at http://www.amsat.cl/)

[ANS thanks Axel Kruuse, CE3AFC and Oscar Cabello, CE3AFX for the above information]

/EX

SB SAT @ AMSAT $ANS-352.06
N1JEZ Adapts AMSAT-UK FUNcube Dongle as SDR Panadaptor

AMSAT News Service Bulletin 352.06
>From AMSAT HQ SILVER SPRING, MD.
December 18, 2011
To All RADIO AMATEURS
BID: $ANS-352.06

AMSAT member, Mike Seguin, N1JEZ is active on the microwave bands in addition to his amateur satellite activities. Mike is AO-7's control station.

Mike wrote and presented a paper, "A Panadapter for the FT-817" at Microwave Update 2011 where he describes using the AMSAT-UK FUNcube Dongle SDR receiver adapted for use as a panadapter display.

Mike is active on 10 GHz and above, using his FT-817 as the IF rig on 144 and 432 MHz with microwave transverters. The FT-817 having a common 68.33 MHz IF (for VHF and UHF) in its receiver fits within the 64 MHz to 1700 MHz range of the FUNcube dongle.

In his paper Mike describes how to find the location to tap the common IF and an active buffer/isolation amp so as to minimize any interaction with the radio.

A copy of Mike's paper and a link to sources of the PC Boards can be found on the W1GHZ Small Projects Page:
http://www.w1ghz.org/small_proj/small_proj.htm

Find out more about the FUNcube Dongle at:
http://www.funcubedongle.com/

[ANS thanks Mike Seguin, N1JEZ for the above information]

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SB SAT @ AMSAT $ANS-352.07
Soyuz Preparations Continue for Three Ham Crew Launch to ISS

AMSAT News Service Bulletin 352.07
>From AMSAT HQ SILVER SPRING, MD.
December 18, 2011
To All RADIO AMATEURS
BID: $ANS-352.07

NASA astronaut Don Pettit KD5MDT, Russian cosmonaut Oleg Kononenko RN3DX and Dutch astronaut Andre Kuipers, PI9ISS continue preparations for their planned Soyuz launch to the ISS on on December 21 at 0816 EST (1316 GMT). The SpaceFlightNow web site posted a photo album of the ISS Expedition 30 crew this week during inspections and fit checks in the seats: http://spaceflightnow.com/station/exp30/111209fitcheck/

The European Space Agency has released a video of Andre Kuipers' mission which can be viewed at:
http://spaceflightnow.com/station/exp30/kuipers.html

The Soyuz TMA-03M spacecraft will be encapsulated in the aerodynamic shroud and then mated to its rocket booster next week in preparation for rollout to the launch pad on December 19. After launch the Soyuz will fly a two-day trek to rendezvous with the station for a planned automated docking December 23 at 1020 EST (1520 GMT).

These three hams are headed for a half-year mission aboard the ISS as members of Expeditions 30 and 31.

[ANS thanks SpaceFlightNow.com for the above information]

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SB SAT @ AMSAT $ANS-352.08
UNISEC Announces Second Micro/Nano-Satellite Technology Idea Contest

AMSAT News Service Bulletin 352.08
>From AMSAT HQ SILVER SPRING, MD.
December 18, 2011
To All RADIO AMATEURS
BID: $ANS-352.08

Japan's University Space Engineering Consortium (UNISEC) announced the second Mission Idea Contest for micro/nano-satellite technology sponsored by the University of Tokyo.

The Mission Idea Contest was established in 2011 to provide aerospace engineers, college students, consultants, and anybody interested in space with opportunities to present their creative ideas and gain attention internationally. The primary goal of this contest is to open a door to a new facet of space exploration and exploitation.

The contest has two categories for entry:

+ Mission Idea and Satellite Design which is open for any individual, group or company with suitable space systems expertise and an enthusiasm for micro/nano-satellites.

+ Mission Idea and Business Model which is open for any individual, group or company with suitable business expertise and an enthusiasm for micro/nano-satellites.

+ The abstract deadline is May 1, 2012.

Finalists will be invited to present in Japan at the 4th Nano-satellite symposium in Nagoya, Japan on October 10-13, 2012. Awards will be announced at a later date. Selected papers will be published in a peer-reviewed journal to provide high visibility for winning ideas and the potential for future collaboration and support for missions.

UNISEC has posted information about the contest at:
http://www.spacemic.net/

AMSAT-UK posted the news at:
http://www.uk.amsat.org/2011/12/13/nanosat-mission-idea-contest/

[ANS thanks University Space Engineering Consortium (UNISEC) for the above information]

/EX

SB SAT @ AMSAT $ANS-352.09
Satellite Shorts From All Over

AMSAT News Service Bulletin 352.09
>From AMSAT HQ SILVER SPRING, MD.
December 18, 2011
To All RADIO AMATEURS
BID: $ANS-352.09

+ Playing this link too often may lead to additional coal in your stocking ... hum along as the NOAA Weather Radio voice (ahem) sings "Deck the Halls":
http://www.youtube.com/watch?v=GJbkQulQw&feature=are

+ While you're recovering from the first video watch: "A Ham's Night Before Christmas" at:
http://www.youtube.com/watch?v=9REVC4dtc

+ Trevor, M5AKA says the ARRL has kindly given permission to put some of the OSCAR 1 articles from the February 1962 edition of QST on the AMSAT-UK website. Links are at the bottom of this article:
http://www.uk.amsat.org/2011/12/12/50th-anniversary-of-oscar-1/

+ Eric, F4EJW announced a new website, AAR29/SAT, where he and Remy, F1NNI provide an online log sharing resource for each of the amateur satellites in service. Go to Eric's blog link, then click on the Amateur Radio Satellite AAR29 banner:
http://f4ejw.over-blog.com/

+ XU, CAMBODIA. A group of JA operators plan to be active from Sihanoukville between January 14-22. Operators mentioned are Masumi/JA3AVO (XU7AVO), Takeo/JA3BZO (XU7AEN), Kunio/JA1CJA/JH3LSS (XU7CJA), Tsuguya/JA3UJR (XU7UJR), Shozo/JA3HJI (XU7HJI pending) and Tatsuo/JA3ARJ (XU7ARJ pending). Activity will probably be on 160-6 meters using CW, SSB and Digital modes. Also look for satellite activity on 2m and 70cm. QSL via their home callsigns. (Ohio/Penn DX Bulletin No. 1040, December 12, 2011)

+ You can see more details and hear more of the mission plans of
these CubeSats:

Delfi-n3Xt video
http://www.youtube.com/watch?v=4rw_BGtaI&feature=are

University of Montana's Explorer-1[Prime]
http://www.youtube.com/watch?v=STzHXv9lY&feature=are

+ Southgate ARC's web has posted an excellent resource page called,
"Working the SSB satellites". There are several links describing
the techniques required for SSB operation as compared to operating
via the FM satellites: http://tinyurl.com/blul4eb (Southgate)

+ George, KA3HSW reported there was a typo in the Topr.txt file as
received from the AO-27 control team: The second line of the file,
which defines the transponder "on" period, should read 420, not 240.
You can edit the file yourself with your favorite text editor, or
download a corrected version of the file from the AO-27 scheduler
website: http://sites.google.com/site/ao27satellitescheduler.

+ A Cuban TV news crew filmed Hector, CO6CBF satellite demonstration
for high school students and teachers in Cienfuegos City, Cuba.
This was broadcast by the national TV in Cuba and now a lot more
hams are interested in satellites. Hector posted his TV video at:
http://www.youtube.com/watch?v=-mbrlVQXI&feature=utu.be
XE1SOV posted a video from his end of a contact with CO6CBF at:
http://www.youtube.com/watch?v=i7vRJk28M

+ AMSAT's Keeper of the Keps, Ray Hoad, WA5QGD reports that Space-
Track has assigned the following catalog numbers to the satellites
launched on October 28:

Cat# Name
----- --------------------------
37850 COSMOS 2251 DEB (boaster)
37851 Dice 1
37852 Dice 2
37853 RAX-2
37854 AUBIESAT-1
37855 HRBE (formally EXP1 Prime renamed for William H. Hiscock,
HRBE =iscock Radiation Belt Explorer)

+ The UK Tech Podcast, FrequencyCast, has released a short video
showing reception in Essex of FM voice and an SSTV image from
the amateur radio satellite ARISSat-1. The 145.950 MHz FM signal
was recorded at 1055 UT on the November 14, 2011. Watch at:
http://www.youtube.com/watch?feature=ayer_embedded&v=Sbj-ga2OA

[ANS thanks everyone for the above information]

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SB SAT @ AMSAT $ANS-352.10
Got CubeSat? ESA January Vega Launch to Fly 6 More

AMSAT News Service Bulletin 352.10
>From AMSAT HQ SILVER SPRING, MD.
December 18, 2011
To All RADIO AMATEURS
BID: $ANS-352.10

The January 12012 inaugural launch of the ESA Vega rocket from the ESA spaceport at Kourou in the Caribbean will carry the amateur radio microsatellite ALMASat-1 and at least 6 CubeSats. The orbit is planned for 1450 by 300 km at an inclination of 69.5 degrees.

There were slots for up to nine CubeSats on the Vega launch. Six, and possibly a seventh, satellites are ready for launch. The six that are ready to fly include:

+ Xatcobeo (a collaboration of the University of Vigo and INTA, Spain) to demonstrate software-defined radio and solar panel deployment.

+ Robusta (University of Montpellier 2, France) to test and evaluate radiation effects (low dose rate) on bipolar transistor electronic components.

+ e-st@r (Politecnico di Torino, Italy) to demonstration of an active 3-axis Attitude Determination and Control system including an inertial measurement unit.

+ Goliat (University of Bucharest, Romania) to provide imaging of the Earth surface using a digital camera and in-situ measurement of radiation dose and micrometeoroid flux.

+ PW-Sat (Warsaw University of Technology, Poland) to test a deployable atmospheric drag augmentation device for de-orbiting CubeSats. PW-Sat carries an FM to DSB amateur radio transponder with an FM input on 435.020 MHz and DSB output on 145.900 MHz.

+ MaSat-1 (Budapest University of Technology and Economics): to demonstrate various spacecraft avionics, including a power conditioning system, transceiver and on-board data handling.

ESA CubeSats delivered for first Vega flight news web page:
http://www.esa.int/esaMI/Education/SEM3L0WWVUG_0.html

ESA Education - CubeSats
http://www.esa.int/esaMI/Education/SEM3N03MDAF_0.html

A picture of ALMASat-1 and the six CubeSats is posted at AMSAT-UK:
http://tinyurl.com/c8o73zw (uk.amsat.org)

The IARU amateur satellite frequency coordination pages hosted by AMAT-UK list the frequencies of the amateur radio satellites:
http://www.amsat.org.uk/iaru/

Mineo Wakita, JE9PEL provides complete coverage of the Vega launch on his 'ESA CubeSats Update' web pages. You'll find an overview of each of the satellite missions, frequencies, modulation/protocols, and links to the developers home web pages posted at: http://www.ne.jp/asahi/hamradio/je9pel/esa9cubf.htm

[ANS thanks ESA, AMSAT-UK, Southgate ARC News site for the above information]

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In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office. And with that, please keep in mind the size of outer space: If the Earth-Sun distance shrinks to one inch, the nearest star lies 4.3 miles away and the diameter of our galaxy is 100,000 miles at this scale.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM
K9JKM at amsat dot org

171. Weekly Highlights of Solar and Geomagnetic Activity, 12 - 18 December 2011

Newsgroup: rec.radio.amateur.space
Date: 2011-12-20 22:30:06 UTC
From: SWPC.Webmaster@noaa.gov
Message-ID: <20111220223001.B5E3333C69@panix2.panix.com>
Source record: 297
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.info

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:Product: Weekly Highlights and Forecasts
:Issued: 2011 Dec 20 2011 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
# Weekly Highlights and Forecasts
#
Highlights of Solar and Geomagnetic Activity
12 - 18 December 2011

Solar activity was at very low to low levels. Region 1367 (S19,
L=076, class/area Cso/030 on 08 December) was the most active region
and produced occasional to frequent C-class flares near and beyond
the west limb during 13-15 December. Region 1376 (N20, L=306,
class/area Dro/020 on 18 December) was also responsible for
producing multiple C-class flares during 17-18 December. There were
no Earth-directed coronal mass ejections observed during the period.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at
normal levels.

Geomagnetic field activity was at mostly quiet levels during most of
the period, with isolated periods of unsettled levels observed at
high latitudes.

Forecast of Solar and Geomagnetic Activity
21 December - 16 January 2012

Solar activity is expected to be at low levels during the period.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is
expected to be at normal to moderate levels during the period.

Geomagnetic field activity is expected to be at quiet levels during
21-27 December. Activity is expected to increase to quiet to
unsettled levels during 28-29 December and 5-6 January due to
recurrent coronal hole high-speed streams. Quiet levels will prevail
30 December - 4 January and 7-16 January.
```

172. ANS-359 AMSAT News Service Weekly Bulletins

Newsgroup: rec.radio.amateur.space
Date: 2011-12-26 20:50:15 UTC
From: JoAnne Maenpaa <k9jkm@comcast.net>
Message-ID: <000a01ccc40f$ecd30e30$c6792a90$@net>
Source record: 298
Cross-posted to: rec.radio.amateur.space,rec.radio.info

AMSAT NEWS SERVICE
ANS-359

ANS is a free, weekly, news and information service of AMSAT North America,
The
Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in
designing, building, launching and communicating through analog and digital
Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:
* Help AMSAT to Fly Fox-1: Solar Panel Campaign Begins
* SKN On OSCAR 2012 In Memory Of W1JSM
* FO-29 Satellite Recovery in Progress
* AMSAT-India Announces Linear Transponder
* UK Space Agency Ukube-2 CubeSat Mission Concept Studies
* Satellite Shorts From All Over
* ARISS Status - 19 December 2011

SB SAT @ AMSAT $ANS-359.01
Help AMSAT to Fly Fox-1: Solar Panel Campaign Begins

AMSAT News Service Bulletin 359.01
From AMSAT HQ SILVER SPRING, MD.
December 25, 2011
To All RADIO AMATEURS
BID: $ANS-359.01

As AMSAT embarks on the Fox-1 Project, here is an opportunity to literally put your callsign on the Fox hardware. AMSAT is looking for major donations to help underwrite the cost of solar cells/ panels, one of the more significant expenses of the project. These solar cells are needed for the flight unit as well as for the a flight spare. As Fox-1 will have solar cells on all six sides of the spacecraft and given the relatively small surface area available on each side (at most 4" by 4" per side), AMSAT will invest in high efficiency solar cells to gain as much power as possible to operate the spacecraft.

To protect the installed solar panels prior to launch, a lexan cover for each side will be fabricated and mounted to protect the cells. Prior to placement of the flight spacecraft into the 'P-Pod' that will house the cubesats on the launch vehicle, the lexan covers will be removed.

"Friends of Fox" are encouraged to consider several levels of funding support:

1. Donate $1,000 to support purchase of one panel that will cover one side of the spacecraft.

2. Donate $6,500 to support the purchase of six sets of solar panels to cover the entire spacecraft.

Donors who contribute at these levels will have their callsign etched on the lexan cover protecting solar panels of the flight unit and the flight spare. Following the launch of Fox-1, donors will receive the lexan solar panel cover with their callsign for 'their' solar panel mounted on a plaque commemorating their contribution to the Fox-1 project and highlighting the purpose of the lexan cover. A letter of authenticity will be provided attesting to the use of the lexan cover to help protect the solar panels.

Other potential donor levels are also available:

1. Donate $500 for one solar cell (two cells make up a 'panel' on one side of the spacecraft).

2. Donate $250 for one-half of a solar cell (one-quarter of the solar panel for one side of the spacecraft.

Donors contributing at these levels will receive a letter affirming their contribution, including specifying which side of the spacecraft 'their' cells are located.

If you're interested in supporting AMSAT's need to purchase solar cells, please return the Fox-1 fundraisingform sent to members. We expect significant interest so make your donation NOW to take full advantage of this donation opportunity.

Additional donation opportunities may be found at:

+ Call Martha at the AMSAT Office +1-888-FB AMSAT (1-888-322-6728)
+ Paypal donation widget on the main page at: http://www.amsat.org
+ Paypal donation widget for Project Fox at:
http://www.amsat.org/amsat-new/fox/
+ You can also go to the Paypal site and send your donation to
martha@amsat.org.
+ The AMSAT Store: http://www.amsat-na.com/store/categories.php

All donations over $40 will receive a Fox pin. Donations of $120 or more qualify you for AMSAT President's Club

[ANS thanks AMSAT President Barry Baines, WD4ASW for the above information]

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SB SAT @ AMSAT $ANS-359.02
SKN On OSCAR 2012 In Memory Of W1JSM

AMSAT News Service Bulletin 359.02
From AMSAT HQ SILVER SPRING, MD.
December 25, 2011
To All RADIO AMATEURS
BID: $ANS-359.02

You are cordially invited to participate in Straight Key Night on OSCAR 2012, conducted by AMSAT for all radio amateurs throughout the world. This year's event is dedicated to the memory of Don Brown, W1JSM, who passed away in 2011, aged 90. Don was a longtime, enthusiastic VHF/UHF and satellite operator, and one of our most frequent Best Fist winners.

As always, SKN on OSCAR is simple and informal. Just operate CW through one or more satellites on 1 January 2012 (0000 to 2400 UTC), using a straight hand key.

There is no need to send in a log, but all participants are encouraged to nominate someone they worked for Best Fist. Your nominee need not have the best fist of anyone you heard, only of those you worked. Send your nomination to w2rs@amsat.org. A list of those nominated will appear in ANS in early February.

[ANS thanks Ray Soifer, W2RS for the above information]

/EX

SB SAT @ AMSAT $ANS-359.03
FO-29 Satellite Recovery in Progress

AMSAT News Service Bulletin 359.03
From AMSAT HQ SILVER SPRING, MD.
December 25, 2011
To All RADIO AMATEURS
BID: $ANS-359.03

The FO-29 Command Team reports from Japan that they have recovered the satellite after it had experienced a shutdown due to longer eclipse periods causing an undervoltage condition.

Ground station operators have placed FO-29 in a temporary, but stable configuration for further testing and recovery operations. They will test FO-29 while it is over Japan between December 23-25.

If no problems occur the Command Team will announce an operating schedule for the satellite for the remainder of 2011 and into the early part of 2012. Please standby for further news and announce-

ments.

[ANS thanks Mineo Wakita, JE9PEL for the above information]

/EX

SB SAT @ AMSAT $ANS-359.04
AMSAT-India Announces Linear Transponder

AMSAT News Service Bulletin 359.04
From AMSAT HQ SILVER SPRING, MD.
December 25, 2011
To All RADIO AMATEURS
BID: $ANS-359.04

AMSAT INDIA had a booth at Hamfest India held on December 10-11. An estimated 900 amateur radio operators and SWLs attended the event. A copy of their satellite presentation can be downloaded from: http://amsatindia.org/presentations/HFI-2011/AI-HFI2011.pdf

AMSAT-India gave several presentations at the event, among them was one by Ganesan Namachivayam KJ6LRR in which he described a satellite 435/145 MHz linear transponder with a bandwidth of 50 kHz and capable of 1-3 watts PEP output. AMSAT-India plan to develop a smaller linear transponder for Cubesats.

Ganesan also described a CubeSat communications system comprising a 435 MHz half-duplex narrow-band FM transceiver supporting a data rate of 1200-9600 bps. The transmitter produces 1 watt output and can also operate as a Morse Code beacon.

Other presentations included:
- Real Time Tracking by Mani VU2WMY
- Working with LEO Sats by Dr. Raveendranath VU2RVJ
- Telemetry Decoding by Nitin VU3TYG

[ANS thanks Secretary - AMSAT INDIA Nitin, VU3TYG for the above information]

/EX

SB SAT @ AMSAT $ANS-359.05
UK Space Agency Ukube-2 CubeSat Mission Concept Studies

AMSAT News Service Bulletin 359.05
From AMSAT HQ SILVER SPRING, MD.
December 25, 2011
To All RADIO AMATEURS
BID: $ANS-359.05

With the UK Space Agency Ukube-1 program currently in development with a planned launch in the second half of 2012 an invitation for participation in studies for future cubesat missions has been announced.

The concept can address a scientific theme or be of an in-orbit technology demonstration nature (e.g. formation flying), providing a real impact to the UK. All UK based communities (academic, industrial and other) are invited to submit proposals. Applications can be made individually or in partnership with other organisations, however industry and academia will be funded under the rules stipulated in the scope of funding presented below.

Funding is available up to £35K per proposal; the size of award will depend on the requirements of the proposed project and the applicants' case for support. Proposals should not exceed a grant value of £35K. Funding will be awarded in 2012 and the project cannot exceed 3 months duration. Due to the short nature of these studies and the amount of funding available, we intend funding successful applicants at the onset of the project. It is anticipated the scheme will fund a minimum of 7 proposals; the facility to fund more will depend on the size of awards and will be assessed on a competitive basis as detailed below.

The deadline for submission of proposals is 1st February 2012, 12pm. Further information can be found by following the links posted on the AMSAT-UK web: http://tinyurl.com/7glkm3f (www.uk.amsat.org)

[ANS thanks AMSAT-UK for the above information]

/EX

SB SAT @ AMSAT $ANS-359.06
Satellite Shorts From All Over

AMSAT News Service Bulletin 359.06
From AMSAT HQ SILVER SPRING, MD.
December 25, 2011
To All RADIO AMATEURS
BID: $ANS-359.06

+ The 2012 SA AMSAT Space Symposium will be held at the University of KwaZulu-Natal on 12 May 2012. This is the second call for papers. Authors are invited to submit a brief synopsis of their proposed paper. The deadline is 31 January 2012. Send a synopsis as a word file attachment to saamsat@intekom.co.za. The theme of the conference is "50 Years of Amateur Radio Satellites" celebrating the launch of OSCAR 1 on 12 December 1961.
SA AMSAT: http://www.amsatsa.org.za/

+ YX6, VENEZUELA. Members of the Radio Club of Venezuela plan to be active as YX6AJ from Angel Falls waterfall (the world's tallest - 979m) between January 3-6th, 2012. Operators mentioned are Lino/YY5FRD, Jesus/YY5CHJ, Marcel/YY5CAR, Wilmer/YY5CWM, Alfredo/YV5SSF, Edwin/YV5HUJ, Jose/YV5JF, William/YV5VE, Angel/YV5NEA and possibly one more. Activity will be on CW, SSB, Digital modes and the Satellites. QSL via YV5AJ, by the Bureau or direct. They have posted a promotional video at:

http://www.youtube.com/watch?feature&#65533;ayer_embedded&vWlufNJtftk
(Ohio/Penn DX Bulletin No. 1041 for December 19, 2011)

+ The Polish amateur radio satellite PW-SAT built by students at the Warsaw University of Technology was featured on the Internet TV channel, BRITE TV. PW-SAT carries a single channel transponder that will operate in a similar way to the amateur satellite AO-16. The uplink on 435.020 MHz will be FM and the downlink on 145.900 MHz will use the BPSK telemetry beacon transmitter to produce Double Sideband (DSB) that can be received on an SSB radio. Watch at:

http://www.youtube.com/watch?feature&#65533;ayer_embedded&vtu7Nqxpkk0

+ The Internet Archive and Textfiles has posted every issue of Wayne Green's 73 Magazine ever published, for free. Read 73 online, or download PDF files here: http://www.archive.org/details/73-magazine

+ A video of the presentation about Amateur Radio Space Communications given by Mario Lorenz DL5MLO to hackers at the Chaos Communication Camp 2011 is now available:

http://www.youtube.com/watch?feature&#65533;ayer_embedded&v&#65533;_RvzceJo4

+ AMSAT area coordinator Clint Bradford, K6LCS, will be presenting his 'Working Amateur Satellites With Your HT' session at the Gwinnett Amateur Radio Society's TechFest 2012 in Lawrenceville, Georgia on January 14, 2012. ALL are welcome to attend!
Event Web site: http://tinyurl.com/GARS-2012
Clint's four-page tutorial and radio programming data can be found at: http://www.work-sat.com

+ Bobby, KF4GTA posted photos of his trip to KSC with access to both Atlantis and Endeavour. The links to his photo pages are: http://flic.kr/p/aVsWfM and http://flic.kr/s/aHsjxni8cR

[ANS thanks everyone for the above information]

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SB SAT @ AMSAT $ANS-359.07
ARISS Status - 19 December 2011

AMSAT News Service Bulletin 359.07
From AMSAT HQ SILVER SPRING, MD.
December 25, 2011
To All RADIO AMATEURS
BID: $ANS-359.07

1. Kobe, Japan Contact Successful

On Monday, December 12, an Amateur Radio on the International Space Station
(ARISS) contact was held between the Hirano Branch of Kobe Youth Nurturing
Council in Kobe-city, Hyogo-pref, Japan and

Astronaut Dan Burbank, KC5ZSX on the
ISS. The contact highlighted lessons covering the ISS and the
environment.
An
audience of approximately 50 people attended the event. Media coverage
included
two newspapers.

2. New Proposal Cycle for ARISS-US Contacts

NASA Teaching From Space (TFS) office recently announced a new proposal
cycle
for ARISS-US contacts. The deadline for submitting proposals is January
30,
2012 for contacts to be held in the July 15, 2012
- January 15, 2013 time frame.
The next informational session will be held on
Wednesday, January 11 at 2100 UTC
to answer any questions concerning the proposal process. To attend the
session
or to have questions answered, contact TFS at
JSC-TFS-ARISS@mail.nasa.gov or
call 281-244-1919.

For more information, visit the TFS Web site:
http://www.nasa.gov/audience/foreducators/teachingfromspace/students/aris
s.h
tml

3. ARISS-U.S. Proposal Process Makes the News

A NASA Express message which included an item on
ARISS contact opportunities for
U.S. schools using the proposal process was sent on December 8. The
message
may
be viewed on the NASA blog:
http://blogs.nasa.gov/cm/newui/blog/viewpostlist.jsp?blogname&#65533;ucation
expre
ss

The NASA Educators Online Network (NEON) posted a link to its ARISS
article,
"Holiday Ham for NASA." See:
http://nasatalk.com/blog/article/bylines/67-dynae-fullwood/1629-holiday-h
am-
for-
nasa.html

The Hartford Hobby Radio Examiner published the story, "Schools can
apply
for

space station radio chats."
http://www.examiner.com/hobby-radio-in-hartford/school-applications-welco
me-
for-
space-station-contacts

4. ARISS Status on Social Media

This is a reminder that ARISS news is available on Twitter and Facebook.
ARISS
has over 200 active users on Facebook and over 800 followers on Twitter.
See:
http://www.facebook.com/pages/Amateur-Radio-on-the-International-Space-St
ati
on-
ARISS/153679794647788
and
http://twitter.com/#!/ARISS_status

[ANS thanks Carol, KB3LKI, for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the
President's
Club. Members of the President's Club, as sustaining donors to AMSAT
Project
Funds, will be eligible to receive additional benefits. Application
forms
are
available from the AMSAT Office.

73,
This week's ANS Editor,
Lee McLamb, KU4OS

173. Weekly Highlights of Solar and Geomagnetic Activity, 19 - 25 December 2011

Newsgroup: rec.radio.amateur.space
Date: 2011-12-27 22:30:05 UTC
From: SWPC.Webmaster@noaa.gov
Message-ID: <20111227223001.D5BAA33C9B@panix2.panix.com>
Source record: 299
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.dx,rec.radio.amateur.space,rec.radio.info

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:Product: Weekly Highlights and Forecasts
:Issued: 2011 Dec 27 1952 UTC
# Prepared by the US Dept. of Commerce, NOAA, Space Weather Prediction Center
# Product description and SWPC contact on the Web
# http://www.swpc.noaa.gov/weekly.html
#
# Weekly Highlights and Forecasts
#
Highlights of Solar and Geomagnetic Activity
19 - 25 December 2011

Solar activity was at very low levels on 19 December and increased
to low levels from 20-24 December, and finally ending the period (25
December) at moderate levels. Region 1376 (N19, L = 308, class/area
Dko/440 on 22 December) was the most active group with frequent B-
and C-class flare production until 25 December when new Region 1387
(S22, L = 226, class/area Dai/440 on 22 December) began producing
multiple C-class flares and one M-class flare. On 22 December at
0208 UTC, Region 1381 (S18, L = 263, class/area Dai/180 on 22
December) produced a C5/Sf flare associated with weak Types II and
IV radio sweeps and a faint CME, determined to be non-geoeffective.
Region 1386 (S17, L = 147, class/area Esi/200 on 26 December)
produced a C5/Sf flare at 24/0839 UTC. Region 1376 produced a
long-duration C4 flare on the west limb at 24/1236 UTC associated
with a non-Earth-directed CME. On 25 December at 1816 UTC, Region
1387 produced an M4/1N flare that was accompanied by Type II
(1019km/s) and Type IV radio emissions.

A slight proton enhancement was observed at geosynchronous orbit on
25 December and achieved a max flux of 3 pfu at 26/0135 UTC.

The greater than 2 MeV electron flux at geosynchronous orbit was at
normal levels.

The geomagnetic field was at predominately quiet levels during most
of the period.

Forecast of Solar and Geomagnetic Activity
28 December - 23 January 2012

Solar activity is expected to be at low to moderate levels until 31
December when Region 1387 is forecast to rotate off the disk.
Activity is expected to return to low levels with a slight chance
for isolated M-class activity for the remainder of the period.
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No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at normal to moderate levels during the period.

Geomagnetic field activity is expected to be at active levels from 28-29 December due to CME arrivals. Diminishing effects from said CME’s are expected to bring geomagnetic field activity to unsettled levels on 30 December. Mostly quiet conditions are predicted on 31 December, 3-4 and 7-23 January. Activity is expected to be at predominately quiet to unsettled levels 1-2 and 5-6 January due to recurrent coronal hole high speed streams.

174. twi version of chris brown's i should have kissed you

Newsgroup: rec.radio.amateur.space
Date: 2011-12-31 11:52:52 UTC
From: kwame oleur <mikbaah@gmail.com>
Message-ID: <0e79a465-65ab-44ad-af86-063a0369e097@p42g2000vbt.googlegroups.com>
Source record: 300

http://youtu.be/w_hbkFldAdk